

# Army Lodging Wellness Recommendation

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## Fort Drum - Final Submittal

August 18, 2003

**3D/I**

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# Section 1 Wellness Recommendation

The Army Lodging Wellness Program is conducted under the direction and guidance of Headquarters Army, Lodging Division (CFSC). The goal of the Fort Drum Lodging Wellness Plan is to provide a comprehensive assessment and planning tool to support long term capitalization of Army Lodging facilities. The Demand Analysis determines installation Lodging requirements, and reviews off-post Lodging availability and cost, arriving at the most economical solution for meeting total transient requirements and providing a final determination of the appropriate number and configuration of on-post Lodging rooms. Individual Lodging facility condition (building and building systems) and functional assessments are included with both recommendations and costs. Facility improvement and renovation versus replacement/new construction recommendations are developed based on the individual facility assessments and cost. A Lodging Master Plan for the installation is developed including renovation, replacement/new construction, and proposed new facility siting. A final recommendation defines the method for achieving the final wellness solution for the installation and will assist with project planning.

## Methodology

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### ***Demand***

- Demand for Lodging facilities is analyzed and adjusted for atypical past occurrences and for expected changes in the installation's population, housing, or mission. Two primary methods are used to calculate the optimum number of rooms: the number necessary to meet 80% of official demand and the number projected to be the most efficient from an operating cost perspective.
- The off-post private market is assessed for capacity and representative rates. A determination is made if the private market has the capability to handle overflow requirements of official demand.
- Room mix recommendation is based on the segmentation of the Permanent Change of Station (PCS)/Temporary Duty (TDY) mix and the expected lengths of stay. This produces the final determination of the appropriate number and configuration of rooms for the installation.

### ***Assessment***

- Existing Lodging facilities are assessed based on building and building system conditions followed by an assessment for

conformance to the Army Lodging functional standards. Facilities assessed to be in fair to good condition, and meeting the majority of functional requirements, are considered for renovation. Renovation of Lodging facilities found in poor condition and configured significantly different than current standards will typically exceed 50% of the replacement costs and are recommended for replacement/new construction. This decision is supported by renovation cost comparisons as well as the assessment documentation.

- The age, condition, and existing configuration of the majority of the existing Lodging buildings support a finding of replacement through new construction in lieu of renovation.
- Force protection construction criteria has a significant impact on new construction. This Wellness recommendation, including building assessment, site analysis, and proposed Lodging construction, incorporates these requirements from the UFC 4-010-01, in our analysis and recommendations. Consistent with the guidance, force protection mitigation is not considered in renovation unless the renovation cost exceeds 50% of the replacement cost for a facility.

## Demand Summary

### ***Room Count and Mix Recommendation***

310 rooms

Proposed room mix:

- 229 standard guest rooms
- 28 extended-stay guest rooms offering a kitchenette;
- 53 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette.

The demand analysis has determined a need of 310 rooms; however, based on existing and proposed building configurations, the actual number recommended for the Fort Drum Wellness Plan will be 311 rooms.

## Lodging Summary

The following Lodging summary for Fort Drum is summarized by building, including number of existing rooms and number of proposed rooms determined as part of the installation Wellness recommendation. The table also indicates the number of rooms required for a new Lodging facility based on buildings not proposed for re-use due to poor existing

conditions and high renovation costs. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration.

Building Number	Existing Rooms					Wellness Recommendation (FY 08)			
	Total Rooms	Std Rms 300 sf	Extend. Stay Rms 300 sf	Family Suites 450 sf	Other Rooms	Total Rooms	Std Rms 300 sf	Extend. Stay Rms 300 sf	Family Suites 450 sf
<b>Wellness Recommendation based on Demand Analysis</b>									
						310	229	28	53
<b>Existing Lodging Facilities</b>									
P4205	111	45	66			111	83	28	
P4700	1				1	0			
P4701	4				4	0			
P4702	1				1	0			
T2251	1				1	0			
T2252	1				1	0			
T2253	1				1	0			
T2254	1				1	0			
T2255	1				1	0			
T2256	1				1	0			
T2257	1				1	0			
T2258	1				1	0			
T2259	1				1	0			
T2340	13			13		0			
<b>Totals</b>	<b>139</b>	<b>45</b>	<b>66</b>	<b>13</b>	<b>15</b>	<b>111</b>	<b>83</b>	<b>28</b>	<b>0</b>
<b>New Proposed Lodging Facility</b>									
						200	148		52
<b>Total Lodging Rooms</b>									
						311	231	28	52

### Summary of Room Count and Mix based on Configuration

- 311 rooms
  - 231 standard guest rooms;
  - 28 extended-stay guest rooms offering a kitchenette;
  - 52 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette

## Cost Summary

### Project Cost

The following table summarizes the Condition Analysis, Renovation, and Replacement Cost by individual Lodging facilities. The Wellness Recommendation indicates cost by building based on recommendation, including the proposed facility cost.

Building Number	Existing Units					Wellness Recommendation (FY 08)			
	Total Rooms	Condition Analysis Cost*	Renovation Cost**	Replacement Cost	% Condition Analysis or Renovation Cost Ratio	Total Rooms	Total Cost	Renovation Cost	New Construction Cost
<b>Existing Lodging Facilities</b>									
P4205	111	*****	\$ 1,143,300	\$ 10,639,955	10.75%	111		\$ 1,143,300	
P4700	1	***	\$ 392,950	\$ 559,125	70.28%	0			
P4701	4	***	\$ 886,450	\$ 1,081,505	81.96%	0			
P4702	1	***	\$ 208,160	\$ 182,615	113.99%	0			
T2251	1	***	\$ 167,375	\$ 208,210	80.39%	0			
T2252	1	***	\$ 167,375	\$ 208,210	80.39%	0			
T2253	1	***	\$ 143,080	\$ 182,615	78.35%	0			
T2254	1	***	\$ 143,080	\$ 182,615	78.35%	0			
T2255	1	***	\$ 143,080	\$ 182,615	78.35%	0			
T2256	1	***	\$ 143,080	\$ 182,615	78.35%	0			
T2257	1	***	\$ 143,080	\$ 182,615	78.35%	0			
T2258	1	***	\$ 144,740	\$ 182,615	79.26%	0			
T2259	1	***	\$ 144,740	\$ 182,615	79.26%	0			
T2340	13	***	\$ 1,353,285	\$ 1,988,305	68.06%	0			
<b>Totals</b>	<b>139</b>					<b>111</b>	<b>\$ 1,143,300</b>	<b>\$ 1,143,300</b>	<b>\$ -</b>
<b>New Proposed Lodging Facility</b>									
						<b>200</b>	<b>\$ 22,581,200</b>		<b>\$ 22,581,200</b>
<b>Total</b>									
						<b>311</b>	<b>\$ 23,724,500</b>	<b>\$ 1,143,300</b>	<b>\$ 22,581,200</b>

- \* The Condition Analysis Cost is for making the building well based on Army Lodging Standards without changing how the building functions.
- \*\* The Renovation Cost is for making the building well based on Army Lodging Standards including making functional changes.
- \*\*\* If the Condition Analysis Cost is under 50% of the Replacement Cost, the Renovation Cost is used.
- \*\*\*\* If the Condition Analysis Cost is over 50% of the Replacement Cost, a Renovation Cost is not included.
- \*\*\*\*\* Condition Assessment Cost and Renovation Cost to renovate based on Army Lodging Standards are indicated in the Renovation Cost

### Cost per Room Comparison

The Wellness Recommendation includes review of off-post Lodging costs compared to the proposed renovation and new construction costs on-post. The renovation and new construction costs include operating costs, capital assessment costs, and sustainment capital expenditures. The following table summarizes this comparison per room for FY08.

	Renovation	New Building	Total
Cost per Room at Fort Drum	\$ 45.36	\$ 60.72	\$ 55.24
Off Post Cost per Room	\$ 62.75	\$ 62.75	\$ 62.75
Difference between On-Post and Off-Post Lodging per room	\$ 17.39	\$ 2.03	\$ 7.51
% Savings of On-Post to Off-Post Lodging	27.7%	3.2%	12.0%

The Cost Per Room at Fort Drum is based on:  
 Renovation / New Construction Cost w/ inflation to FY 08  
 Current Operating Cost w/ inflation to FY 08  
 Cap Ex Cost  
 Capital Assessment Cost to FY 08  
 Off Post Cost is based on current room rate average with inflation to FY 08

Due to this cost difference and the savings of 12.0%, it is our recommendation that the Army construct a new Lodging facility and retain one existing facility at Fort Drum in lieu of using off-post lodging to

support the determined demand requirement. Off-post lodging will continue to be used for demand beyond the on-post room requirement.

## Recommendations/Conclusions

The Wellness Recommendation for Fort Drum is to continue the use of building P-4205 with 111 rooms and to construct a new main Lodging facility on-post to accommodate the public and back-of-the house spaces and 200 rooms, for a total of 311 rooms, to meet the 310 room requirement. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration. Existing Lodging facilities that do not meet condition and functional requirements based on cost shall be removed from the Lodging inventory. A synopsis of recommended building actions follows:

- Construct a new Lodging facility to include 200 rooms. This building will be planned to include public and back-of-the-house Lodging functions for the total on-post Lodging inventory.
- Continue the use of Building P-4205 to include 83 standard rooms and 28 extended stay rooms as part of the requirements. Renovate rooms to meet Army Lodging requirements and existing public and back-of-the-house spaces to reflect the requirement for a secondary facility, removing functions that will be incorporated into the new main Lodging facility.
- Remove all other existing Lodging buildings from the Lodging inventory due to condition of existing building systems and/or cost to renovate to meet Army functional criteria.

### ***Cost Summary***

The cost for this recommendation will be:

Renovation of building P-4205	\$ 1,143,300
New Lodging Facility	\$22,581,200
<b>Total</b>	<b>\$23,724,500</b>

### ***Phasing***

Recommend the following phasing as funding is identified.

- Minimize investment in infrastructure for buildings P-4700, P-4701, P-4702, T-2251, T-2252, T-2253, T-2254, T-2255, T-2256, T-2257, T-2258, T-2259, and T-2340.

- Construct new Lodging facility prior to removing existing Lodging facilities from inventory and removing back-of-the-house and public spaces from building P-4205.
- Renovate building P-4205 for condition assessment deficiencies and reconfiguration of public and back-of-the-house and public spaces.
- Remove buildings P-4700, P-4701, P-4702, T-2251, T-2252, T-2253, T-2254, T-2255, T-2256, T-2257, T-2258, T-2259, and T-2340 from Lodging inventory.

## Section 2 Lodging Master Plan

### Installation Summary

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Fort Drum, located in northern New York along the Black River, has been used as a military training site since 1908. The primary mission includes command of active component units assigned to the installation, administrative and logistical support to tenant units, support to tenant units, support to active and reserve units from all services in training at Fort Drum, and planning and support for the mobilization and training of almost 80,000 troops annually. The installation consists of 107,265 acres.



The Fort Drum Installation Design Guide incorporates specific installation requirements. Land use, future development, and architectural compatibility are integral components of the Guide. Current Lodging room night requirements, Army guidance on Lodging facility design standards, and force protection construction standards required additional analyses and were incorporated into the recommendations of the Lodging Wellness Plan.

The character of Fort Drum has been preserved and enhanced through the use of stone, brick, and stucco. Medium to low sloped tile roofs, light toned natural stone and brick, small window and exterior openings, often shaded by overhangs, exemplify the desired architecture of the installation.

### Master Plan Summary

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Lodging facilities at Fort Drum were constructed in various phases and are located in several areas of the installation. A thorough condition and functional assessment of the existing buildings noted significant deficiencies. Additionally, renovation of these buildings to the new Lodging standards and building configuration design is not viable within the 50% threshold. The existing primary Lodging facility, Building P-4205, is located on Po Valley Road, near the Fitness Center, Library, Education complex, and the Community Service building.

The proposed Fort Drum Lodging Master Plan reflects 311 Lodging rooms with replacement of approximately 93% of the existing Lodging buildings into a new Lodging facility. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration. This new facility, in conjunction with existing Lodging facility P-4205, will combine required rooms, public areas and service functions into a

cohesive Lodging physical plant in support of the installation requirements. Siting of the new 200 room Lodging facility is recommended across the street from Clark Hall, providing a central location for visitors.

## Existing Lodging Facilities

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### ***Lodging Building P-4205 “The Inn at Fort Drum”***

Building P-4205, constructed in 1988, is a 2-story structure housing 45 standard rooms at 324 square feet each, 64 extended stay rooms without a full kitchen at 384 square feet each and 2 extended stay rooms without a full kitchen at 432 square feet. The building is in good condition and meets the majority of current Army Lodging standards. The cost to make improvements will not exceed 50% of the replacement cost.

Our recommendation is to retain building P-4205 in the Fort Drum Lodging inventory. This facility will remain in the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building P-4700 “The Caretaker’s House”***

Building P-4700, constructed in 1830, is a historic 2-story structure housing one DVQ room with a full kitchen at 2,055 square feet. The building is in good condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building P4700 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building P-4701 “The LeRay Mansion”***

Building P-4701, constructed in 1822, is a 2-story historic structure housing 4 DVQ rooms with a full kitchen at 546 square feet each. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building P4701 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.





### ***Lodging Building P-4702***

Building P-4702, constructed in 1822, is a single story historic structure housing one DVQ room with a full kitchen at 800 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building P4702 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2251***

Building T-2251, constructed in 1944, is a single story structure housing one single room without a full kitchen at 969 square feet. The building is in fair condition but does not meet current Lodging size standards. The cost to make improvements and bring up this building up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2251 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2252***

Building T-2252, constructed in 1944, is a single story structure housing one family suite with a full kitchen at 969 square feet. The building is in fair condition but does not meet current Lodging size standards. The cost to make improvements and bring up this building up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2252 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2253***

Building T-2253, constructed in 1944, is a single story structure housing a single standard room at 607 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2253 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2254***

Building T-2254, constructed in 1944, is a single story structure housing a single standard room at 607 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2254 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2255***

Building T-2255, constructed in 1944, is a single story structure housing a single standard room at 607 square feet. The building is in good condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2254 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2256***

Building T-2256, constructed in 1944, is a single story structure housing a single standard room at 607 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2256 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.

#### ***Lodging Building T-2257***



Building T-2257, constructed in 1944, is a single story structure housing a single standard room at 607 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2257 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.

#### ***Lodging Building T-2258***



Building T-2258, constructed in 1944, is a single story structure housing a single standard room at 460 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2258 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.

#### ***Lodging Building T-2259***



Building T-2259, constructed in 1944, is a single story structure housing a single standard room at 672 square feet. The building is in fair condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2259 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.



### ***Lodging Building T-2340***

Building T-2340, constructed in 1944, is a 2-story structure housing 13 family suites with a full kitchen at 480 square feet each. The building is in good condition but does not meet current Army Lodging standards. The cost to make improvements and bring this facility up to Army Lodging standards will exceed the 50% replacement cost.

Our recommendation is to remove building T-2340 from the Lodging inventory, allowing the installation to determine an alternate use for the facility. This facility will be removed from the Fort Drum Wellness Solution and Lodging Master Plan.

## **New Lodging Building**

The proposed replacement/new Lodging facility includes 200 total guest rooms; 148 standard guest rooms, 52 family suites, and all public areas and back-of-the-house spaces to support the entire Lodging inventory on Fort Drum. The number of rooms for the new proposed Lodging facility reflects the proposed layout and does not match the exact demand numbers, because of building configuration.

The proposed new construction will be sited across the street from Clark Hall, the main in-processing building for Fort Drum, providing a central and convenient location for visitors. The new site will be located on Mount Belvedere Boulevard, on an axis with the headquarters building and existing parade ground. The proposed three-story building construction is masonry and steel or concrete, with brick veneer and standing seam metal roof to match the existing architectural character of Fort Drum. The architectural guidance for Fort Drum is specific and is incorporated into the cost of the new facility.

The mass and scale of the proposed building is critical. Based on the number of required rooms and to limit the length of the wings, the recommendation of this plan is to provide varying roof levels to promote interest and character, while providing relief from the scale of the facility. The building would maintain a 3-story height, tapering to 2-story on the four wings. All wings will contain a mix of standard rooms and family suites. A play area adjacent to the family suites is anticipated. The entrance would be further emphasized by a one story height covered drop-off area.

## Areas and Occupancy

The following chart indicates all spaces and size for the proposed new construction based on the program and the proposed conceptual building plan.

ROOM / SPACE	PROGRAMMED FLOOR AREA			PLAN FLOOR AREA
	No. Req'd	Net Area Per Room	Total Net Area	
<b>Total Area including 9% Add On Factor</b> (does not include Outside Areas)*			<b>119,805</b>	<b>120,543</b>
<b>Public Areas</b>			<b>32,066</b>	<b>31,575</b>
Exterior Entrance	N/A	N/A		-
Vestibule	1	1	-	-
Lobby (includes vestibule)	1	800-1,000	800-1,000	1,321
Front Desk	3 stations	250	250	243
Bell Cart Station	4	12	48	53
Breakfast Bar (Seat/Svc) - min.	1	550	550	595
Passenger Elevators	2 elev. @ 3 floors	64	384	384
Stairs	10	230	6,900	4,540
Public Corridors	-	-	20,200	20,211
Public Telephone Area	3	6	18	20
Vending - Full Service	2	70	140	287
Vending - Ice Only	1	30	30	268
Women - Lobby	1	260	260	261
Men - Lobby	1	260	260	261
Multi-Purpose Room - (250 s.f. min.)	1	250	250	416
Study Rooms (1 per 25 ext stay units)	-	250	-	558
Guest Laundries (2 sets w/d per 75 units)	3	192	576	759
Gear Wash Rooms - (170 s.f. min.)	4	170	680	699
Guest Bulk Storage (1 per 4 family suites)	13	25 ea. 40 w/circ.	520	699
<b>Guest Rooms</b>	<b>200</b>		<b>67,800</b>	<b>67,800</b>
Guest Room - Standard	148	300	44,400	44,400
Guest Room - Ext. Stay		300	-	-
Guest Room - Family Suites	52	450	23,400	23,400
<b>Back-of-House Areas</b>			<b>10,047</b>	<b>11,686</b>
Manager's Office	1	180	180	189
Assistant Manager Offices	1	120	120	122
Front Office Manager	1	100	100	100
Admin. Offices	5 staff	500-600	500-600	604
Cash Room	1	100	100	101
Luggage Storage	1	100	100	108
Admin. Conference Room	1	350	350	416
Housekeeping Office	1	120	120	120
Dirty/Clean Linen Storage	-	100	-	-
In-House Laundry - (500 s.f. minimum)	1	500	500	538
Receiving Office	1	75	75	83
Maintenance Area	1	250	250	250
Kitchen Prep Room	1	150	150	210
Break Room	1	280	280	292
Staff Toilet - Men	1	100	100	110
Staff Toilet - Women	1	150	150	110
Access Corridor	-	-	900	897
Receiving -min.	1	150	150	223
Housekeeping Rooms	1 per 15 units	128	1,792	1,826
Service Elevator	1	80	240	255
Data/Commo Room	1	150	150	158
Switch Closets	4	16	64	794
Janitor Closet	1	50	50	108
Mechanical Room	-	-	1,822	1,596
General Storage Room - (500 s.f. min.)	1	600	600	973
Bulk Storage Room - (500 s.f. min.)	1	600	600	974
Electrical Room	3	140	420	444
Elevator Equipment Room	1	84	84	85
<b>Exterior</b>			<b>400</b>	
Playground (Outdoor)	1	-	-	-
Grounds Maintenance	1	400	400	-

\* Add on factor to cover s.f. for partitions and any space not included in numbers above.

### **Cost Summary**

The New Construction Cost \$22,581,200

- All costs are adjusted by the Area Cost Factor of 113% for Fort Drum.

### **Cost Analysis**

#### **Summary of Project Replacement Cost (based on 120,543 s.f.)**

<b>CSI</b>	<b>Percent</b>	<b>Amount</b>
<b>02 Site Work</b>	<b>3.26%</b>	<b>\$496,686.98</b>
Parking Lots		\$189,794.80
Site Earthwork		\$306,892.18
<b>03 Concrete</b>	<b>20.87%</b>	<b>\$3,183,233.28</b>
Floor Construction		\$2,207,738.18
Slab on Grade		\$227,265.60
Stair Construction		\$66,444.00
Standard Foundations		\$681,785.50
<b>04 Masonry</b>	<b>4.45%</b>	<b>\$679,396.87</b>
Exterior Walls		\$679,396.87
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.10%</b>	<b>\$930,554.97</b>
Roof Construction		\$373,174.13
Roof Coverings		\$557,380.84
<b>08 Doors &amp; Windows</b>	<b>8.01%</b>	<b>\$1,222,292.75</b>
Exterior Doors		\$24,284.83
Exterior Windows		\$949,200.00
Interior Doors		\$248,807.92
<b>09 Finishes</b>	<b>18.07%</b>	<b>\$2,755,976.87</b>
Ceiling Finishes		\$713,076.35
Floor Finishes		\$938,666.70
Partitions		\$613,949.46
Wall Finishes		\$490,284.35
<b>10 Specialties</b>	<b>0.03%</b>	<b>\$3,830.14</b>
Fittings		\$3,830.14
<b>11 Equipment</b>	<b>1.47%</b>	<b>\$224,908.99</b>
Commercial Equipment		\$17,091.25
Other Equipment		\$207,817.74
<b>13 Special Construction</b>	<b>5.38%</b>	<b>\$820,869.74</b>
Communications & Security		\$369,527.74
Sprinklers		\$451,342.00
<b>14 Conveying Systems</b>	<b>1.59%</b>	<b>\$242,724.00</b>
Elevators and Lifts		\$242,724.00
<b>15 Mechanical</b>	<b>16.50%</b>	<b>\$2,516,386.83</b>
Cooling Generating Systems		\$1,090,856.80
Domestic Water Dist		\$463,752.00
Plumbing Fixtures		\$961,778.03
<b>16 Electrical</b>	<b>7.71%</b>	<b>\$1,175,448.60</b>
Electrical Service & Distribution		\$1,168,007.55

Site Lighting		\$7,441.05
<b>19 FF&amp;E</b>	<b>6.56%</b>	<b>\$1,000,000.00</b>
Interior FF&E allowance		\$1,000,000.00
Total Raw Cost	100.00%	\$15,252,310.01
<b>Additional Hard Cost (Template: Army Lodging New Construction)</b>		
<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Spirit	0.50%	\$83,887.71
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$1,525,231.00
<b>Total Additional Hard Cost</b>		<b>\$1,609,118.71</b>
<b>Soft Cost (Template: Army Lodging New Construction)</b>		
<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$843,071.44
SIOH Conus	6.50%	\$1,150,792.51
Design	10.00%	\$1,686,142.87
08 MYr Inflation Fct	9.93%	\$2,039,764.55
<b>Total Soft Cost</b>		<b>\$5,719,771.37</b>
<b>Total Project Cost for Replacement</b>		<b>\$22,581,200.09</b>

**INSERT PROPOSED CAMPUS AREA ANALYSIS DRAWING HERE**

**INSERT LODGING MASTER PLAN DRAWING HERE**

**INSERT PROPOSED LODGING FACILITY DRAWINGS (FLRS. 1-3) HERE**

### Section 3 Demand Analysis

Fort Drum is home to the 10<sup>th</sup> Mountain Division and the primary training/drill installation for the 27<sup>th</sup> Infantry Brigade. The 10<sup>th</sup> Mountain Division is a rapid deployment, light-infantry unit.

A limited amount of training occurs at the installation. The three schools on the installation are the Light Fighter's School, the Army Mountain Warfare School, and the Noncommissioned Officer's Academy.

Fort Drum's population changed little over the last five years, no more than 2% over any three-to five-year period. These minor changes did not significantly impact lodging demand. The post expects minimal population growth over the next five years.

Fort Drum lodging demand in 2002 consisted of: 23% Permanent Change of Station (PCS), 66% Temporary Duty (TDY), and 11% unofficial. Unofficial demand is not used in the calculation of recommended optimum room inventory. Most PCS room nights are 14 days or less in length, with the remainder averaging 24-day stays. Approximately 40% of the TDY demand is from reservists, and few of them stay more than 14 days. Similarly, non-reservist TDY personnel typically also stay less than 14 days. The limited number of TDY personnel staying longer than 14 days are usually attending one of the installation's schools.

The table on the following page describes Fort Richardson's official demand population. Note that average stay estimates were based upon discussions with Fort Drum's Lodging management. The 2002 average length of stay data distorts the average; it was attributed to exceptional long-term stays of reservists called to active duty at that time.

Fort Drum Official Market Demand Analysis			
	TDY Excluding Reservists	TDY Reservists Only	PCS
<b>Total Demand:</b>	27%	39%	23%
<b>Market Segmentation:</b>			
Individuals	100%	100%	< 10%
Families	0%	0%	> 90%
<b>Average Length of Stay (Days):</b>			
14 days or less	80%	95%	73% (5 days)
More than 14 days	20%	5%	27% (24 days)

Source: Fort Drum Lodging Administration, compiled by Evans & Chastain, L.L.P.

## On Post Inventory

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Fort Drum has 640 rooms in 30 buildings. Approximately 501 lodging units are located in World War II-era wooden buildings with central latrines. These facilities are primarily used for reservists and overflow personnel; Lodging closes them in winter months.

## Demand and Utilization

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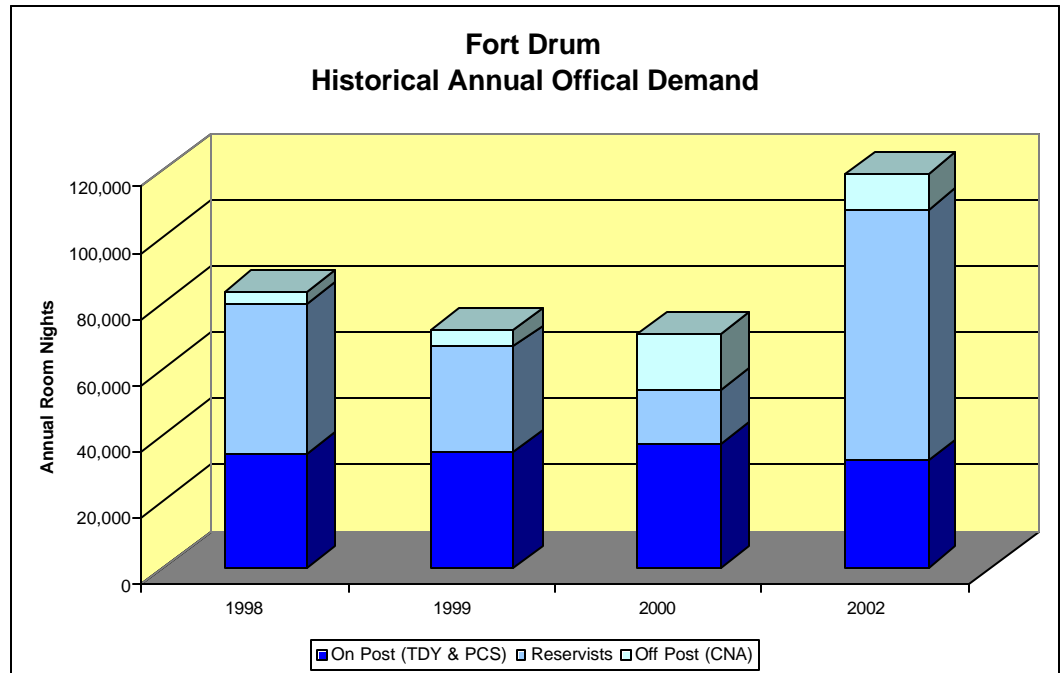
### **Data Summary**

Fort Drum's lodging demand is split between PCS demand, non-reservist TDY demand, and reservist TDY demand. The largest demand component is from reserve personnel and is concentrated in summer months. The lodging demand exclusive of reservists is relatively small.

Official lodging demand for 1998 through 2001, including CNAs, ranged from 178 to 230 room nights per day each year, with an average of 200 room nights per day over the four-year period. In 2002, demand increased substantially to an average of 327 room nights per day when reservists were called to active duty.

CNAs are relatively insignificant, averaging 25 room nights per day from 1998 through 2001. Approximately 63% were issued from June through August when PCS and reservist demand were at their peaks.

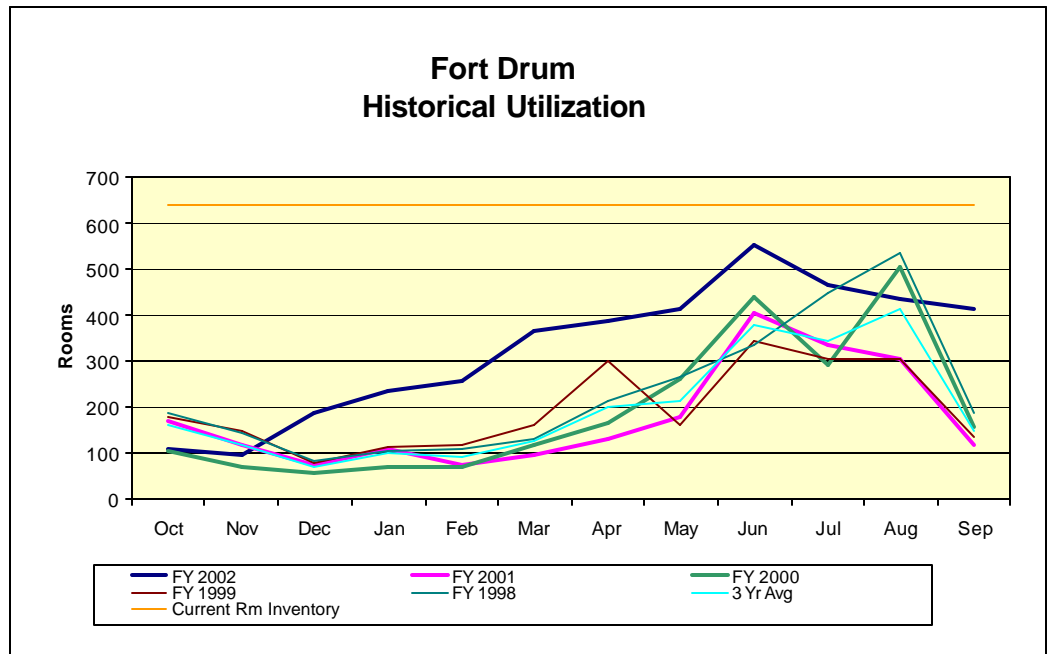
The chart below summarizes Fort Drum historical data; it identifies annual official demand both on and off post.



Source: Fort Drum Lodging Administration, compiled by Evans & Chastain, L.L.P.

Occupancy ranged from 30% to 43% from 1998 through 2001. In 2002, occupancy increased to 63% because of reservists being called to active duty. If the 501 rooms used to lodge the reservists were excluded, occupancy would increase to 85% to 90%. Because of the large number of rooms maintained for reservists, Lodging is experiencing a much higher of vacancy level than is desirable.

The following chart summarizes historical utilization data by month.



Source: Fort Drum Lodging Administration, compiled by Evans & Chastain, L.L.P.

Excluding 2002, monthly variances between years were occasionally significant. It appears these variances related to reservists engaging in annual two-week exercise/training. Given that these exercises occur each year, the related monthly demand variances between years is insignificant.

### **Seasonality**

Fort Drum's lodging demand cycle experiences definite seasonality. The peak demand occurred in June, July, and August when official demand rose as high as 550 rooms on average per night. Average demand during these months was 350 to 410 rooms per night compared to the balance of the year when it typically ranged from 120 to 215 rooms per night. Demand dropped from December through February to 75 to 100 rooms per night, which is consistent with lower PCS and TDY activity.

### **Factors Influencing Demand**

We could not identify factors likely to alter demand or occupancy rates significantly in the next two to five years. Additionally, the installation expects no demographic or mission changes which would influence the segmentation between the TDY and PCS mix.

Fort Drum has 4,272 family housing units. The Residential Communities Initiative identified a surplus of on-post housing and recommended an 11% decrease to 3,816 units. This is not expected to impact PCS personnel lodging demand materially.

## Private Market Capability

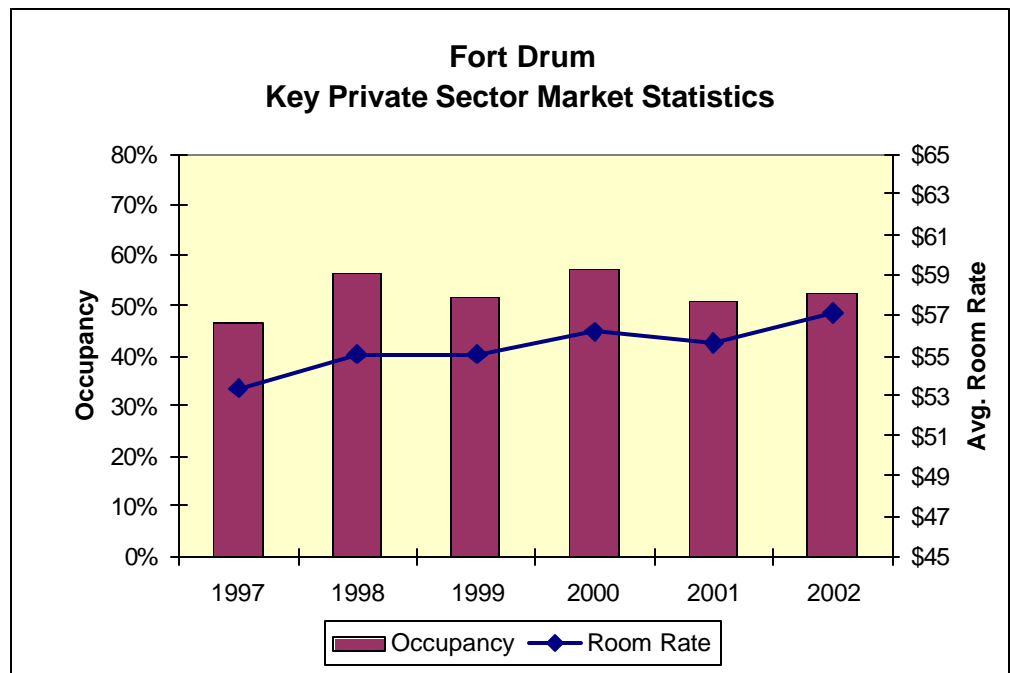
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There are no other military lodging operations within a 30-minute rush-hour driving time radius of Fort Drum.

The commercial market within that radius offers approximately 600 rooms meeting minimum standards. Only 60% of these rooms are located in properties representing the major lodging chains. The other rooms are in small, proprietary lodging operations. The market is stagnant, with no new rooms having been added in the last six years. As can be seen in the graph on the next page, occupancy ranged from 47% to 56%, but most recently it has been at 52%. This level of utilization is unlikely to induce a significant number of rooms being built in the near future. A review of the major hotel chains immediately around Fort Drum does not suggest any strong seasonal demand peaks in the private market. Summer occupancy peaks at 60% to 65% occupancy. It is unlikely, however, that the local market could adequately support the need for lodging if the number of rooms maintained on the installation were significantly reduced.

The Average Daily Rate (ADR) increased approximately 7% in the last five years. The \$57.08 2002 ADR was slightly above the \$55.00 per diem rate, but 16% above the ADR for three contracted lodging properties. This discounting is indicative of a stagnant market.

The next chart describes key private market statistics.



Source: Smith Travel Research, compiled by Evans & Chastain, L.L.P.

Based on the major hotel chains' summertime occupancies, it appears the market has capacity to support 100 to 150 rooms from June through August. Any additional demand sent off post would be required to stay in smaller and potentially substandard facilities or require travel time of more than 30 minutes.

## Fort Drum Demand Requirement Determination

Fort Drum's 1998 through 2001 lodging demand average is the best basis for estimating future demand. The 2002 lodging demand increase is not deemed sustainable long-term. Fort Drum's relatively stable population further supports the use of 1998 to 2001 average demand.

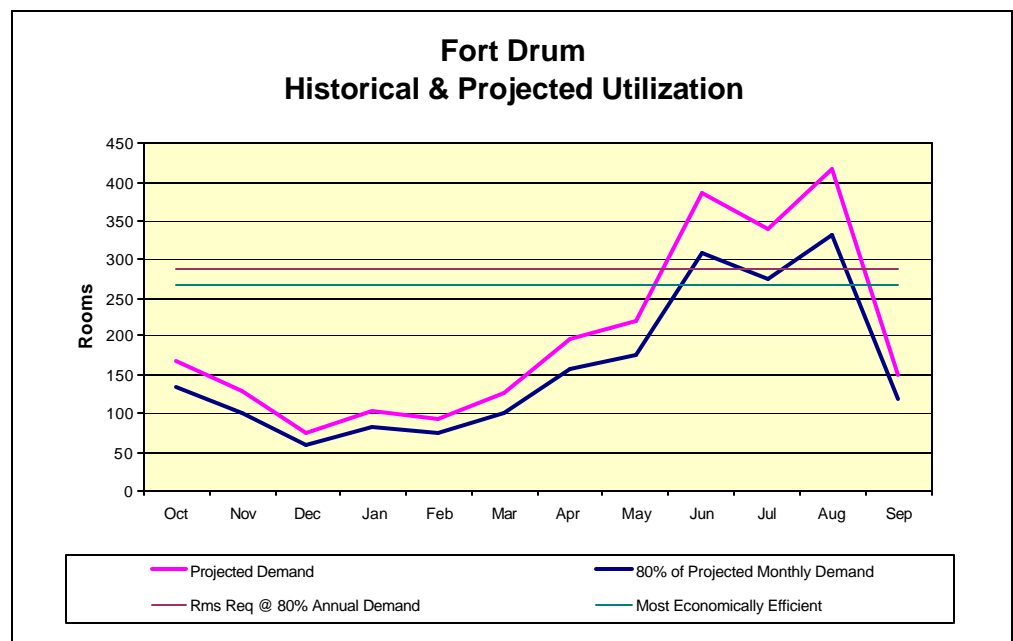
Because of variances in monthly demand within years, the average demand for the indicated period should be normalized. The normalization process eliminates monthly demand peaks or valleys where official demand is 20% greater or 20% less than the average. Variances greater or less than 20% are atypical and unlikely to reoccur. While the normalization process adjusted the demand in several months, it neither increased nor decreased demand overall.

The Core Lodging Requirement objective is to provide sufficient lodging to meet 80% of the official demand. Using this criterion, the total number

of rooms required on an annualized basis is 286, generating occupancy of 65%. This is a 55% reduction of the current lodging inventory.

Another method for determining the number of rooms to be provided at the installation is to apply the “Most Economically Efficient” criterion. This measure compares the cost of having a vacant room to the incremental cost of lodging personnel off post. When the cost of these scenarios is at equilibrium, the most cost efficient number of rooms will be provided from an operational cost perspective. The number of rooms required to achieve equilibrium for Fort Drum is 267 rooms. With a room inventory of 267 rooms, the expected occupancy is 67%.

The chart below compares the alternatives to room inventory to the projected demand.



Source: Fort Drum Lodging Administration and Evans & Chastain, L.L.P.

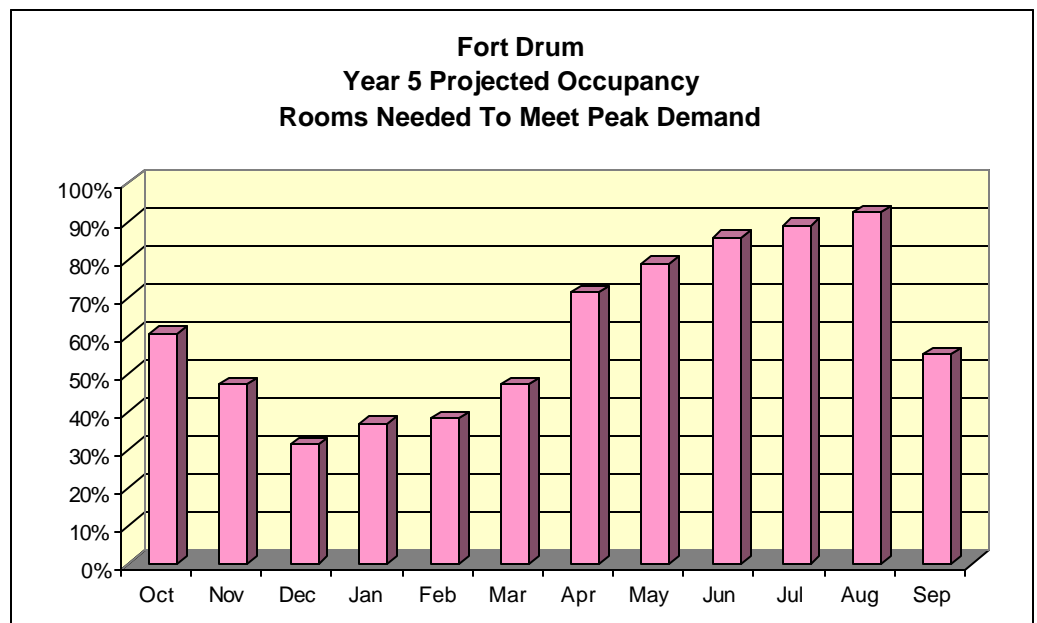
The number of rooms indicated by both the “80% of Official Demand” criterion and the “Most Economically Efficient” criterion are relatively close, but both assume the commercial lodging market can fully accommodate any demand not lodged on the installation. This is not the case for Fort Drum.

As discussed earlier, the number of rooms needed in the summer typically ranges from 350 to 410; the commercial market is capable of handling demand for an additional 100 to 150 rooms. This assumes a maximum 85% average occupancy for the nationally affiliated chains.

Recognizing the need to allow for daily spikes in demand, it is recommended enough rooms be provided on post so that the average demand for off post lodging increases by no more than 100 rooms. This would require 310 rooms on post. This approximates the number suggested by the “80% of Official Demand” criterion.

Data show that PCS demand is more consistent on a month-to-month basis than TDY demand. This consistency allows reduction of the number extended-stay suites relative to the PCS demand as percentage of the total demand. An analysis of the monthly PCS demand over the last three years indicates 53 rooms will meet the PCS personnel needs, and 53 extended-stay suites are recommended. (An allocation of rooms strictly based upon percentage of demand would allocate 79 rooms as extended-stay suites.) The mix of the rooms with and without kitchenettes is based upon the market segmentation for TDY personnel currently lodged on post.

The following chart presents expected occupancy percentages on a monthly basis.



Source: Evans & Chastain, L.L.P.

With 310 rooms, the average occupancy is expected to be 61.5%, and 83% of the official demand is met. The anticipated FY08 ADR is \$31.50. On a monthly basis, occupancy will range from 86% to 92% in the summer months and 31% to 78% during the balance of the year.

## Summary and Recommendation

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- Fort Drum's population was stable over the last five years, and minimal growth is anticipated over the next five years
- The local private sector lodging market is stagnant and has limited additional capacity to house any incremental personnel not currently housed on post
- The 1998 through 2001 average official demand is the best basis for estimating future demand
- Very few guests are sent off post, except in the summer months when the increased demand from reservists exceeds the on-post lodging inventory
- The appropriate number of rooms supported by demand analysis at Fort Drum is 310. This is the minimum number of rooms needed to meet average monthly peak demand in the summer. This room inventory generates an expected occupancy rate of 61.5%, and 83% of the official demand is met.

### ***Room Count and Mix Recommendation***

- 310 units
- Proposed room mix:
  - 229 standard guest rooms
  - 28 extended-stay guest rooms offering a kitchenette
  - 53 extended-stay family suites offering a separate bedroom, sitting/living area, and kitchenette

# Section 4 Facility Assessment and Plans

Each Lodging facility is detailed in this section of the report. The outline of the detail is described below:

- **Summary of Existing Lodging Facility**
- **Significant Assumptions**, identifies criteria used for renovation / replacement cost models.
- **Cost Analysis**, summarizes recommendation based on cost.
- **Attributes**, describes number of rooms and configuration.
- **Condition Analysis and Recommendations** for each of the major systems of the building.
- **Major Functional Criteria Deficit**, describes any major Functional inadequacy based on Army standards.
- **Condition Assessment / Renovation / Replacement Analysis**
  - **Condition Assessment**, summarizes building system deficiencies grouped by CSI with additional hard cost and soft cost.
  - **Renovation**, summarizes building system costs plus functional renovation costs grouped by CSI with additional hard cost and soft cost.
  - **Replacement**, summarizes replacement cost grouped by CSI with additional hard cost and soft cost.

**Special Note**, if a building is being retained based on the Wellness Recommendation, and has some renovations in order to meet Army Lodging standards, two cost models are used. The Condition Cost is used for wellness items and the Renovation Cost for functional renovations. These two cost need to be added together for the full renovation cost.

On this installation **Building 4205** uses both cost models for the total renovation.



## Building P4205

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Building P-4205 was constructed in 1988. The 57,320 square foot facility contains 111 lodging rooms functioning as 45 standard rooms without a full kitchen at 324 square feet each, 64 extended stay rooms without a full kitchen at 384 square feet each and 2 family suites without a full kitchen at 432 square feet.

### Significant Assumptions

The replacement cost model is based on 81 standard stay rooms, 28 extended stay rooms and 2 family suites.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

This building is in good condition for both the Condition Assessment and Function Criteria. In this building the Condition Assessment costs include the wellness items and the Renovation Cost includes functional renovations but not Condition Assessment cost due to the limited nature of the renovation. Therefore in the Cost Analysis the sum of the Condition Assessment and Renovation cost is used for the ratio to the Replacement Cost

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined for a secondary building in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Fort Drum.

### Cost Analysis

Condition Assessment & Renovation Cost	\$1,143,300.00
Replacement Cost	\$10,639,955.00
Condition Assessment to Replacement Cost Ratio	10.75%

Because the Sum of the Condition Assessment and Renovation Costs to Replacement Cost Ratio is less than 50%, repair and continued use of Building P-4205 is recommended.

## Attributes

01.Number of Units Constructed	111
02.Number of Units Used	111
03.Back of House Function	Yes
04.Single Room w/o FullKitchen	110
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	110
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	81
14.Renovated to Extended Stay	28
15.Renovated to Family Suite	2
16.Delta renovation	0

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Room: The hard goods consist of head boards, night stands, dresser in each bedroom, desk w/chair, a couch, davenport, table w/chairs, easy chairs, coffee table, end tables and a TV cabinet with drawers. They are in good condition. The soft goods consist of drapes and blinds on the windows, TV and bed. They are in good condition.
- Recommendation: No corrective action required however some additional FF&E will be needed due to the specific renovation required to meet Lodging Standards.

### **Foundations**

#### **Standard Foundations**

- Analysis: The concrete stem wall foundation is in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: The concrete slab on grade at the first floor, and the second floor concrete hollow core planks, are in good condition.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The structure is slab on grade for the first floor, and poured in place concrete for the second floors. They are in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The steel-framed roof structure is in good condition. The gutters are in fair condition.
- Recommendation: Replace the gutters and downspouts.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The brick veneer walls are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The aluminum single hung, double pane windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal storefront doors and the exterior metal doors are in good condition.

- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The roof is a standing seam metal roof. There is minor cosmetic damage from hail, however the weathertightness has not been affected. The overall roof condition is good.
- Recommendation: No corrective action required.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition. The bathroom walls have ceramic tile over drywall. The tile is in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

### **Fittings**

- Analysis: The bathroom fittings consist of a tissue holder, towel rack and medicine cabinet with mirror. The fittings are in good condition. The public bathrooms have toilet and urinal partitions. The fittings are in good condition.
- Recommendation: No corrective action required.

## **Stairs**

### **Stair Construction**

- Analysis: The stairs are steel and concrete with rubber coated treads. The stairs are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in good condition.
- Recommendation: No corrective action required.

### **Floor Finishes**

- Analysis: The floor finishes consist of carpeted common areas and guest rooms and sheet vinyl in the guest and common area bathrooms. The carpet is currently being replaced throughout the building. The sheet vinyl is in fair condition.
- Recommendation: Replace the sheet vinyl with ceramic floor tile.

### **Ceiling Finishes**

- Analysis: The ceiling finishes are a combination of painted drywall in the guest rooms and some back of house spaces and acoustic ceiling tile and grid in public spaces. The finishes are in like new condition.
- Recommendation: No corrective action required.

## **Conveying**

### **Elevators and Lifts**

- Analysis: There are no elevators in this building.
- Recommendation: No corrective action required.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower/tub. The ventilation is provided by individually controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: No corrective action required.

### **Domestic Water Distribution**

- Analysis: The gas fired A.O. Smith boiler with storage tanks is in good condition. The copper piping is in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The Energy Knight PTAC heating and cooling system is in good condition.
- Recommendation: No corrective action required.

## **Fire Protection**

### **Sprinklers**

- Analysis: The fire sprinklers are in good condition.
- Recommendation: No corrective action required.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The Siemens switch gear and panels with a Siemens 2500 amp electrical service is in good condition. The interior lighting is in poor condition.
- Recommendation: Replace the interior fixtures and lighting.

### **Communications and Security**

- Analysis: A fire annunciator exists for this facility.
- Recommendation: No corrective action required.

## **Equipment**

### **Other Equipment**

- Analysis: The building contains all back of house laundry functions for the lodging facilities on post. The commercial laundry appliances as well as the guest laundry appliances are in good condition. 28 of the guest rooms require the installation of two burner stoves and stove exhaust.
- Recommendation: Install new two burner stoves in the specified rooms.

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site earthwork is in good condition except for erosion at the building perimeter
- Recommendation: Regrade and landscape the building perimeter.

## **Site Improvements**

### **Parking Lots**

- Analysis: The parking lots are in good condition, however, they do not meet force protection requirements.
- Recommendation: Adjust parking lots to conform to force protection guidelines.

## **Site Electrical Utilities**

### **Site Lighting**

- Analysis: The site lighting is in good condition.
- Recommendation: No corrective action required.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Administrative offices including Manger, Asst. Manager,  
and Admin. Conference

Undersized or does not exist.

Renovation Recommendation: Will be included as part of  
new main Lodging facility.

Service Elevator

Does not exist.

Renovation Recommendation: Leave as is, building is two-  
story.

In House Laundry

In house laundry is undersized based on standards.

Renovation Recommendation: Space will be included in  
new main Lodging facility.

Staff Toilets

Not sized to standards.

Renovation Recommendation: Will be included as part of  
renovation to this building.

Maintenance Office, Bulk Storage, General Storage,  
Receiving.

Do not exist.

Renovation Recommendation: Will be included as part of  
new main Lodging facility.

- **Public Spaces**

Front Desk

Undersized.

Renovation Recommendation: Will be included as part of new main Lodging facility.

Bell Cart Station

Does not exist.

Renovation Recommendation: Will be included as part of renovation to this building.

Breakfast Area

Does not exist.

Renovation Recommendation: Will be included as part of new main Lodging facility.

Public Corridors

Existing corridors are 5' wide.

Renovation Recommendation: :Leave as is. It is felt this deficiency does not effect the intent of the standards.

Study Room

Do not exist.

Renovation Recommendation: Add as part of renovation of this building.

Vending

Do not exist.

Renovation Recommendation: Add as part of renovation of this building.

Public Toilet Rooms

Undersized. .

Renovation Recommendation: Will be included as part of new main Lodging facility.

Multipurpose Room

Does not exist.

Renovation Recommendation: Will be included as part of new main Lodging facility.

Gear Wash Room

Do not exist.

Renovation Recommendation: Renovate to incorporate two gear wash rooms into this building.

Passenger Elevator

Does not exist.

Renovation Recommendation: Leave as is, building is two-story.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>1.43%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.91%</b>	<b>\$22,272.30</b>
Gutters: Damaged or Failing		\$22,272.30
<b>09 Finishes</b>	<b>15.16%</b>	<b>\$48,861.26</b>
Floor Tile: Damaged or Failing		\$48,861.26
<b>11 Equipment</b>	<b>7.86%</b>	<b>\$25,343.64</b>
Stove: Missing or inadequate		\$25,343.64
<b>15 Mechanical</b>	<b>10.44%</b>	<b>\$33,648.44</b>
Kitchen exhaust: Damaged or failing		\$33,648.44
<b>16 Electrical</b>	<b>58.20%</b>	<b>\$187,580.00</b>
Fixtures, Incandescent: Missing or inadequate		\$187,580.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$322,317.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,772.74
Force Protection	9.00%	\$32,068.93
General Conditions	10.00%	\$32,231.70
<b>Total Additional Hard Cost</b>		<b>\$66,073.37</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$38,839.04
SIOH Conus	6.50%	\$27,769.91
Design	10.00%	\$38,839.04
08 MYr Inflation Fct	9.93%	\$49,038.15
<b>Total Soft Cost</b>		<b>\$154,486.14</b>
<b>Total Project</b>		<b>\$542,876.51</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>08 Doors &amp; Windows</b>	<b>1.71%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>70.71%</b>	<b>\$252,070.44</b>
Ceiling Finishes		\$39,444.01
Floor Finishes		\$80,879.35
Partitions		\$114,224.17
Wall Finishes		\$17,522.91
<b>10 Specialties</b>	<b>0.02%</b>	<b>\$87.63</b>
Fittings		\$87.63
<b>11 Equipment</b>	<b>3.22%</b>	<b>\$11,489.84</b>
Other Equipment		\$11,489.84
<b>13 Special Construction</b>	<b>11.05%</b>	<b>\$39,378.80</b>
Communications & Security		\$7,878.92
Sprinklers		\$31,499.88
<b>15 Mechanical</b>	<b>4.45%</b>	<b>\$15,876.50</b>
Plumbing Fixtures		\$15,876.50
<b>16 Electrical</b>	<b>8.84%</b>	<b>\$31,499.88</b>
Electrical Service & Distribution		\$31,499.88
Total Raw Cost	100.00%	\$356,484.76

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,960.67
Force Protection	9.00%	\$35,468.45
General Conditions	10.00%	\$35,648.48
<b>Total Additional Hard Cost</b>		<b>\$73,077.59</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$42,956.24
SIOH Conus	6.50%	\$30,713.71
Design	10.00%	\$42,956.24
08 MYr Inflation Fct	9.93%	\$54,236.52
<b>Total Soft Cost</b>		<b>\$170,862.70</b>
<b>Total Project Cost for Renovation</b>		<b>\$600,425.05</b>

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.16%</b>	<b>\$299,188.83</b>
Parking Lots		\$105,632.40
Site Earthwork		\$193,556.43
<b>03 Concrete</b>	<b>15.18%</b>	<b>\$1,090,863.70</b>
Floor Construction		\$636,016.10
Slab on Grade		\$143,312.25
Stair Construction		\$24,916.50
Standard Foundations		\$286,618.85
<b>04 Masonry</b>	<b>4.63%</b>	<b>\$332,836.97</b>
Exterior Walls		\$332,836.97
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.16%</b>	<b>\$514,573.45</b>
Roof Construction		\$162,785.81
Roof Coverings		\$351,787.64
<b>08 Doors &amp; Windows</b>	<b>9.26%</b>	<b>\$665,562.09</b>
Exterior Doors		\$11,102.25
Exterior Windows		\$519,800.00
Interior Doors		\$134,659.84
<b>09 Finishes</b>	<b>14.49%</b>	<b>\$1,041,308.43</b>
Ceiling Finishes		\$158,767.40
Floor Finishes		\$387,330.77
Partitions		\$279,600.55
Wall Finishes		\$215,609.72
<b>10 Specialties</b>	<b>0.05%</b>	<b>\$3,830.14</b>
Fittings		\$3,830.14
<b>11 Equipment</b>	<b>3.63%</b>	<b>\$261,030.00</b>
Other Equipment		\$261,030.00
<b>13 Special Construction</b>	<b>4.80%</b>	<b>\$345,089.10</b>
Communications & Security		\$155,347.42
Sprinklers		\$189,741.68
<b>14 Conveying Systems</b>	<b>3.38%</b>	<b>\$242,724.00</b>
Elevators and Lifts		\$242,724.00
<b>15 Mechanical</b>	<b>18.62%</b>	<b>\$1,337,974.24</b>
Cooling Generating Systems		\$458,590.16
Domestic Water Dist		\$227,808.00
Plumbing Fixtures		\$651,576.08
<b>16 Electrical</b>	<b>6.91%</b>	<b>\$496,698.85</b>
Electrical Service & Distribution		\$491,738.15
Site Lighting		\$4,960.70
<b>19 FF&amp;E</b>	<b>7.72%</b>	<b>\$555,000.00</b>
Interior FF&E allowance		\$555,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$7,186,679.79</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Spirit	0.50%	\$39,526.74
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$718,667.98
<b>Total Additional Hard Cost</b>		<b>\$758,194.72</b>

**Soft Cost (Template: Army Lodging New Construction)**

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$397,243.73
SIOH Conus	6.50%	\$542,237.69
Design	10.00%	\$794,487.45
08 MYr Inflation Fct	9.93%	\$961,109.15
<b>Total Soft Cost</b>		<b>\$2,695,078.01</b>
<b>Total Project Cost for Replacement</b>		<b>\$10,639,952.51</b>

**INSERT BUILDING P4205 FLOOR PLANS HERE  
(EXISTING AND RENOVATION PLANS)**



## Building P4700

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Building P-4700 was constructed in 1830. The 2,055 square foot facility contains a DVQ with a full kitchen. The building is functioning as a family suite for high ranking visitors.

### Significant Assumptions

The replacement and renovation cost models are based on 2 family suites and 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$392,950.00
Replacement Cost	\$559,125.00
Renovation to Replacement Cost Ratio	70.28%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-4700 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	1
11.Operating as Extended Stay	0
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	2
16.Delta renovation	3

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The limestone foundation with a concrete slab-on-grade basement floor is in fair condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The first floor wood framing with steel I-beam support and the second floor wood framing are in fair condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The sloped wood roof structure is in good condition
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The limestone walls are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The exterior windows are a wood single glazed double hung unit with a six lite sash. The windows are in fair condition.
- Recommendation: Replace the windows with new double glazed, energy efficient window units.

#### **Exterior Doors**

- Analysis: The exterior doors consist of solid core wood doors in wood frames. They are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The standing seam metal roof is in good condition.
- Recommendation: No corrective action required.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are plaster on wood lath over wood stud framing. The walls are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Stairs**

### **Stair Construction**

- Analysis: There are no stairs in this building.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are paint over plaster. The paint is in good condition.
- Recommendation: Install vinyl wall coverings.

### **Floor Finishes**

- Analysis: The floors are covered with a combination of carpeting in the bedrooms and living areas and sheet vinyl in the kitchen area. The carpet and sheet vinyl are in fair condition.
- Recommendation: Replace the carpet and sheet vinyl.

### **Ceiling Finishes**

- Analysis: The ceiling finishes are a combination of painted plaster or drywall and a suspended acoustic tile with grid system. The paint and acoustic tile are in fair condition.
- Recommendation: Repaint the ceilings. Replace the acoustic tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: The bathrooms contain a lavatory and vanity, combination shower/tub and a water closet. The fixtures are in good condition.
- Recommendation: No corrective action required.

### **Domestic Water Distribution**

- Analysis: The Rheem 52 gallon electric hot water heater is in fair condition. The waste and supply piping are in poor condition.
- Recommendation: Replace the hot water heater and supply and waste piping.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired Trane high efficiency forced air system is in good condition.
- Recommendation: No corrective action required.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The Murray 200 amp electrical service is in poor condition. The wiring and receptacles are in fair condition. The interior lighting and fixtures are in fair condition.
- Recommendation: Replace the 200 amp electrical service, wiring and receptacles. Replace the interior lighting and fixtures.

### **Communications and Security**

- Analysis: No fire annunciator is installed.
- Recommendation: Install a fire annunciator.

## **Equipment**

### **Other Equipment**

- Analysis: Other equipment in this building includes a clothes washer and dryer, stove, refrigerator and microwave. The equipment is in good condition.
- Recommendation: No corrective action required.

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site drainage appears to be inadequate and in good condition.
- Recommendation: No corrective action required.

## **Site Improvements**

### **Parking Lots**

- Analysis: This building has a garage with the a driveway that is in good condition.
- Recommendation: No corrective action required.

## **Site Electrical Utilities**

### **Site Lighting**

- Analysis: The site lighting is in poor condition.
- Recommendation: Install one new pole and light.

## Major Functional Criteria

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms and 2 family suites. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>08 Doors &amp; Windows</b>	<b>13.66%</b>	<b>\$8,845.76</b>
Wood Framed windows: Damaged or failing		\$8,845.76
<b>09 Finishes</b>	<b>22.64%</b>	<b>\$14,657.26</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$954.97
Carpet: Beyond Useful Life		\$2,888.39
Interior ceilings: Paint Failing		\$848.05
Sheet Vinyl: Damaged or Failing		\$390.15
Vinyl Wall Covering: Damaged or Failing		\$9,575.70
<b>13 Special Construction</b>	<b>16.48%</b>	<b>\$10,665.31</b>
Fire Alarm Command: Missing or Inadequate		\$799.85
Fire Sprinklers: Missing or Inadequate		\$9,865.46
<b>15 Mechanical</b>	<b>11.09%</b>	<b>\$7,180.43</b>
Pipe, domestic water: Beyond expected useful life		\$3,649.18
Water heater: Beyond expected useful life		\$3,531.25
<b>16 Electrical</b>	<b>36.13%</b>	<b>\$23,386.44</b>
Branch Circuits: Beyond Expected Useful Life		\$7,283.88
Fixture: Incandescent fixture beyond expected life		\$9,634.44
Inadequate exterior Lighting		\$3,785.50
Main service: Beyond expected useful life		\$2,682.62
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$64,735.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$356.04
Force Protection	9.00%	\$6,440.81
General Conditions	10.00%	\$6,473.50
<b>Total Additional Hard Cost</b>		<b>\$13,270.35</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$7,800.54
SIOH Conus	6.50%	\$5,577.38
Design	10.00%	\$7,800.54
08 MYr Inflation Fct	9.93%	\$9,848.95
<b>Total Soft Cost</b>		<b>\$31,027.40</b>
<b>Total Project</b>		<b>\$109,032.76</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>1.62%</b>	<b>\$3,785.50</b>
Site Development		\$3,785.50
<b>03 Concrete</b>	<b>3.56%</b>	<b>\$8,305.50</b>
Stair Construction		\$8,305.50
<b>07 Thermal &amp; Moisture Protection</b>	<b>1.41%</b>	<b>\$3,280.44</b>
Roof Construction		\$3,280.44
<b>08 Doors &amp; Windows</b>	<b>19.51%</b>	<b>\$45,516.40</b>
Exterior Windows		\$36,160.00
Interior Doors		\$9,356.40
<b>09 Finishes</b>	<b>24.33%</b>	<b>\$56,773.57</b>
Ceiling Finishes		\$10,358.15
Floor Finishes		\$14,838.80
Partitions		\$11,942.83
Wall Finishes		\$19,633.80
<b>10 Specialties</b>	<b>0.15%</b>	<b>\$350.53</b>
Fittings		\$350.53
<b>11 Equipment</b>	<b>6.78%</b>	<b>\$15,820.00</b>
Other Equipment		\$15,820.00
<b>13 Special Construction</b>	<b>5.99%</b>	<b>\$13,979.34</b>
Communications & Security		\$6,293.03
Sprinklers		\$7,686.32
<b>15 Mechanical</b>	<b>17.99%</b>	<b>\$41,968.20</b>
Cooling Generating Systems		\$18,577.20
Domestic Water Dist		\$10,170.00
Plumbing Fixtures		\$13,221.00
<b>16 Electrical</b>	<b>10.08%</b>	<b>\$23,523.78</b>
Electrical Service & Distribution		\$19,738.28
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>8.57%</b>	<b>\$20,000.00</b>
Interior FF&E allowance		\$20,000.00
Total Raw Cost	100.00%	\$233,303.25

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,283.17
Force Protection	9.00%	\$23,212.51
General Conditions	10.00%	\$23,330.33
<b>Total Additional Hard Cost</b>		<b>\$47,826.00</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$28,112.93

SIOH Conus	6.50%	\$20,100.74
Design	10.00%	\$28,112.93
08 MYr Inflation Fct	9.93%	\$35,495.37
<b>Total Soft Cost</b>		<b>\$111,821.96</b>
<b>Total Project Cost for Renovation</b>		<b>\$392,951.21</b>

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>3.64%</b>	<b>\$13,730.21</b>
Parking Lots		\$4,294.00
Site Earthwork		\$9,436.21
<b>03 Concrete</b>	<b>15.85%</b>	<b>\$59,873.15</b>
Floor Construction		\$30,792.60
Slab on Grade		\$6,926.90
Stair Construction		\$8,305.50
Standard Foundations		\$13,848.15
<b>04 Masonry</b>	<b>11.85%</b>	<b>\$44,736.15</b>
Exterior Walls		\$44,736.15
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.75%</b>	<b>\$25,490.03</b>
Roof Construction		\$7,708.25
Roof Coverings		\$17,781.78
<b>08 Doors &amp; Windows</b>	<b>15.36%</b>	<b>\$58,022.11</b>
Exterior Doors		\$11,102.25
Exterior Windows		\$36,160.00
Interior Doors		\$10,759.86
<b>09 Finishes</b>	<b>12.51%</b>	<b>\$47,256.60</b>
Ceiling Finishes		\$7,695.74
Floor Finishes		\$15,775.87
Partitions		\$12,938.07
Wall Finishes		\$10,846.92
<b>11 Equipment</b>	<b>4.19%</b>	<b>\$15,820.00</b>
Other Equipment		\$15,820.00
<b>13 Special Construction</b>	<b>4.41%</b>	<b>\$16,673.17</b>
Communications & Security		\$7,505.70
Sprinklers		\$9,167.48
<b>15 Mechanical</b>	<b>12.06%</b>	<b>\$45,548.04</b>
Cooling Generating Systems		\$22,157.04
Domestic Water Dist		\$10,170.00
Plumbing Fixtures		\$13,221.00
<b>16 Electrical</b>	<b>8.08%</b>	<b>\$30,508.31</b>
Electrical Service & Distribution		\$28,027.96
Site Lighting		\$2,480.35
<b>19 FF&amp;E</b>	<b>5.30%</b>	<b>\$20,000.00</b>
Interior FF&E allowance		\$20,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$377,657.77</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$2,077.12
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$37,765.78

<b>Total Additional Hard Cost</b>	<b>\$39,842.89</b>
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**Soft Cost (Template: Army Lodging New Construction)**

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$20,875.03
SIOH Conus	6.50%	\$28,494.42
Design	10.00%	\$41,750.07
08 MYr Inflation Fct	9.93%	\$50,505.98
<b>Total Soft Cost</b>		<b>\$141,625.50</b>
<b>Total Project Cost for Replacement</b>		<b>\$559,126.16</b>

**INSERT BUILDING P4700 FLOOR PLANS HERE**



## Building P4701

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Building P-4701 was constructed in 1822. The 5,914 square foot facility contains 4 DVQs with full kitchens. The building is functioning as family suites for high ranking visitors.

### Significant Assumptions

The replacement and renovation cost models are based on 8 family suites.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$886,45.00
Replacement Cost	\$1,081,505.00
Renovation to Replacement Cost Ratio	81.96%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-4701 is not recommended.

## Attributes

01.Number of Units Constructed	4
02.Number of Units Used	4
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	4
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	4
11.Operating as Extended Stay	0
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	0
15.Renovated to Family Suite	8
16.Delta renovation	4

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of a stone spread footer bearing large stone blocks rising a few feet above grade supporting the structural masonry walls. Aside from a number of minor stress fractures consistent with this type of construction, the foundation appears to be in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: The basement of this structure has a modern concrete slab on grade. The slab has numerous spalls and faults. It is in fair condition but should be reviewed by a structural engineer.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The floor construction is finished wood resting on a planked sub-floor supported by timber joists set into the structural masonry walls and columns. The finish on the exposed flooring is in fair condition.
- Recommendation: Sand and refinish the floors.

#### **Roof Construction**

- Analysis: The roof construction is planked sheathing attached to sloped timber rafters. The roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The exterior walls are structural stone and brick masonry. The walls are in fair condition.
- Recommendation: Repoint the damaged mortar joints.

#### **Exterior Windows**

- Analysis: The exterior windows are a wood single glazed double hung unit with a six lite sash. The windows are in poor condition.

- Recommendation: Replace the damaged windows.

#### **Exterior Doors**

- Analysis: The exterior doors consist of solid core wood doors in wood frames. They are in fair condition.

- Recommendation: Replace the doors and frames.

### **Roofing**

#### **Roof Coverings**

- Analysis: The roof covering is a standing seam metal roof in good condition.

- Recommendation: No corrective action required.

### **Interior Construction**

#### **Partitions**

- Analysis: The interior partitions are plaster on wood lath over wood stud framing. The walls are in good condition.

- Recommendation: No corrective action required.

#### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.

- Recommendation: No corrective action required.

### **Stairs**

#### **Stair Construction**

- Analysis: The stairs are boxed frame construction with turned spindle balusters and finished oak tread and risers. The stairs are in good condition.

- Recommendation: No corrective action required.

### **Interior Finishes**

#### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted plaster and vinyl wall covering. The wall finishes are in good condition.

- Recommendation: Replace vinyl wall coverings.

#### **Floor Finishes**

- Analysis: The floor finishes are a combination of carpet, exposed wood flooring, tiled bathrooms and sheet vinyl in the kitchen area. The sheet vinyl is in poor condition.

- Recommendation: Replace the sheet vinyl in the kitchen area.

#### **Ceiling Finishes**

- Analysis: The interior ceilings are painted plaster. There are several stress fractures in the plaster. The paint is in fair condition.

- Recommendation: Repair the damaged plaster. Repaint the ceilings.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each bedroom has an individual bathroom containing a lavatory and vanity, a water closet and a built in place showertub. The plumbing fixtures are in fair condition.

- Recommendation: Replace all fixtures due to remodel.

### **Domestic Water Distribution**

- Analysis: The hot water heater is in fair condition. The copper piping system is in fair condition.

- Recommendation: Replace the hot water heater and the distribution piping.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The heat is provided by a Burnum oil fired boiler with a two-pipe, four zone system. The heating system is in fair condition. There is no air conditioning in the building.

- Recommendation: Replace the heating system with a packaged terminal heat pump units with auxiliary heat.

## **Fire Protection**

### **Sprinklers**

- Analysis: There is a forced water sprinkler system installed throughout the structure. There are smoke and heat detectors that are hard wired in each living unit. The system is in good condition.

- Recommendation: No corrective action required.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The electricity is provided by a pad mounted transformer delivering power to a 400 amp switchboard with bus bar located in the basement. The sub-panels are located throughout the basement area. The electrical system is in poor condition.

- Recommendation: Replace the branch circuits, wiring and receptacles. Replace the main service switchboard. Replace the interior lighting and fixtures.

### **Communications and Security**

- Analysis: The fire alarm system was upgraded within the last 5 years and is in good condition. The fire panel emits a radio signal directly to the fire department. The building has smoke detectors hard wired to the buildings electrical system.

- Recommendation: No corrective action required.

## **Equipment**

### **Other Equipment**

- Analysis: The kitchen has a complete appliance set that is in good condition.

- Recommendation: No corrective action required.

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site consists of grass covered yard areas and shared parking lots with access to main roads. The site is graded properly to allow for drainage. The site is in good condition.
- Recommendation: No corrective action required.

## **Site Improvements**

### **Parking Lots**

- Analysis: The parking area is adequate for the buildings needs. The pavement is in fair condition.
- Recommendation: Repave the parking area.

## **Site Electrical Utilities**

### **Site Lighting**

- Analysis: The site lighting is provided by pole mounted HPS lights. These are in good condition.
- Recommendation: No corrective action required.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 8 family suites. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>1.64%</b>	<b>\$3,472.36</b>
Parking: AC Pavement Damaged or Failing		\$3,472.36
<b>04 Masonry</b>	<b>1.89%</b>	<b>\$4,012.00</b>
CMU Wall Mortar: Damaged or Cracked		\$4,012.00
<b>08 Doors &amp; Windows</b>	<b>4.64%</b>	<b>\$9,839.47</b>
Al. Windows - Beyond Useful Life		\$5,973.06
Exterior Wood Doors: Beyond Useful Life		\$3,866.41
<b>09 Finishes</b>	<b>24.12%</b>	<b>\$51,168.79</b>
Interior ceilings: Paint Failing		\$3,892.21
Plaster Ceiling: Damaged or Failing		\$10,685.28
Sheet Vinyl: Beyond Useful Life		\$1,555.76
Vinyl Wall Covering: Beyond expected useful life		\$23,156.98
Wood Flooring: Damaged or Failing		\$11,878.56
<b>15 Mechanical</b>	<b>35.58%</b>	<b>\$75,502.18</b>
Bath tub: Replace due to remodel		\$7,162.84
Pipe, Copper: Damaged or failing		\$15,650.99
Pipe, sewer or waste: Beyond expected useful life		\$11,267.29
PTAC: Missing or inadequate		\$27,925.46
Sink & vanity: Replace due to remodel		\$4,365.76
Water closet: Replace due to remodel		\$5,598.59
Water heater: Beyond expected useful life		\$3,531.25
<b>16 Electrical</b>	<b>32.14%</b>	<b>\$68,188.77</b>
Branch Circuits: Beyond Expected Useful Life		\$19,497.07
Fixture: Incandescent fixture beyond expected life		\$25,792.25
Inadequate exterior Lighting		\$15,142.00
Main service: Beyond expected useful life		\$7,757.45
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$212,184.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,167.01
Force Protection	9.00%	\$21,111.25
General Conditions	10.00%	\$21,218.40
<b>Total Additional Hard Cost</b>		<b>\$43,496.66</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$25,568.07
SIOH Conus	6.50%	\$18,281.17
Design	10.00%	\$25,568.07

08 MYr Inflation Fct	9.93%	\$32,282.23
<b>Total Soft Cost</b>		<b>\$101,699.53</b>
<b>Total Project</b>		<b>\$357,380.19</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>0.66%</b>	<b>\$3,472.49</b>
Site Development		\$3,472.49
<b>03 Concrete</b>	<b>1.58%</b>	<b>\$8,305.50</b>
Stair Construction		\$8,305.50
<b>04 Masonry</b>	<b>0.76%</b>	<b>\$4,013.76</b>
Exterior Walls		\$4,013.76
<b>07 Thermal &amp; Moisture Protection</b>	<b>1.59%</b>	<b>\$8,359.03</b>
Roof Construction		\$8,359.03
<b>08 Doors &amp; Windows</b>	<b>14.65%</b>	<b>\$77,112.33</b>
Exterior Doors		\$6,966.45
Exterior Windows		\$54,240.00
Interior Doors		\$15,905.88
<b>09 Finishes</b>	<b>25.88%</b>	<b>\$136,208.07</b>
Ceiling Finishes		\$24,859.55
Floor Finishes		\$31,633.22
Partitions		\$30,432.11
Wall Finishes		\$49,283.19
<b>10 Specialties</b>	<b>0.13%</b>	<b>\$701.05</b>
Fittings		\$701.05
<b>11 Equipment</b>	<b>6.01%</b>	<b>\$31,640.00</b>
Other Equipment		\$31,640.00
<b>13 Special Construction</b>	<b>7.64%</b>	<b>\$40,230.58</b>
Communications & Security		\$18,110.44
Sprinklers		\$22,120.13
<b>15 Mechanical</b>	<b>19.82%</b>	<b>\$104,312.56</b>
Cooling Generating Systems		\$53,462.56
Domestic Water Dist		\$24,408.00
Plumbing Fixtures		\$26,442.00
<b>16 Electrical</b>	<b>13.67%</b>	<b>\$71,945.97</b>
Electrical Service & Distribution		\$56,803.97
Site Lighting		\$15,142.00
<b>19 FF&amp;E</b>	<b>7.60%</b>	<b>\$40,000.00</b>
Interior FF&E allowance		\$40,000.00
Total Raw Cost	100.00%	\$526,301.34

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$2,894.66
Force Protection	9.00%	\$52,364.35
General Conditions	10.00%	\$52,630.13
<b>Total Additional Hard Cost</b>		<b>\$107,889.14</b>

**Soft Cost (Template: Army Lodging Renovation)**

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	10.00%	\$63,419.05
SIOH Conus	6.50%	\$45,344.62
Design	10.00%	\$63,419.05
08 MYr Inflation Fct	9.93%	\$80,072.86
<b>Total Soft Cost</b>		<b>\$252,255.57</b>
<b>Total Project Cost for Renovation</b>		<b>\$886,446.06</b>

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>3.90%</b>	<b>\$28,515.13</b>
Parking Lots		\$7,729.20
Site Earthwork		\$20,785.93
<b>03 Concrete</b>	<b>16.86%</b>	<b>\$123,130.37</b>
Floor Construction		\$68,828.22
Slab on Grade		\$15,334.10
Stair Construction		\$8,305.50
Standard Foundations		\$30,662.55
<b>04 Masonry</b>	<b>8.57%</b>	<b>\$62,630.61</b>
Exterior Walls		\$62,630.61
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.71%</b>	<b>\$56,296.89</b>
Roof Construction		\$17,922.29
Roof Coverings		\$38,374.60
<b>08 Doors &amp; Windows</b>	<b>11.31%</b>	<b>\$82,651.59</b>
Exterior Doors		\$11,102.25
Exterior Windows		\$54,240.00
Interior Doors		\$17,309.34
<b>09 Finishes</b>	<b>15.02%</b>	<b>\$109,709.62</b>
Ceiling Finishes		\$17,456.70
Floor Finishes		\$32,024.34
Partitions		\$31,759.09
Wall Finishes		\$28,469.49
<b>11 Equipment</b>	<b>4.33%</b>	<b>\$31,640.00</b>
Other Equipment		\$31,640.00
<b>13 Special Construction</b>	<b>5.05%</b>	<b>\$36,917.71</b>
Communications & Security		\$16,619.10
Sprinklers		\$20,298.61
<b>15 Mechanical</b>	<b>13.68%</b>	<b>\$99,910.08</b>
Cooling Generating Systems		\$49,060.08
Domestic Water Dist		\$24,408.00
Plumbing Fixtures		\$26,442.00
<b>16 Electrical</b>	<b>8.09%</b>	<b>\$59,092.79</b>
Electrical Service & Distribution		\$56,612.44
Site Lighting		\$2,480.35
<b>19 FF&amp;E</b>	<b>5.48%</b>	<b>\$40,000.00</b>
Interior FF&E allowance		\$40,000.00
Total Raw Cost	100.00%	\$730,494.79

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,017.72
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$73,049.48

**Total Additional Hard Cost** **\$77,067.20**

**Soft Cost (Template: Army Lodging New Construction)**

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$40,378.10
SIOH Conus	6.50%	\$55,116.11
Design	10.00%	\$80,756.20
08 MYr Inflation Fct	9.93%	\$97,692.57
<b>Total Soft Cost</b>		<b>\$273,942.97</b>
<b>Total Project Cost for Replacement</b>		<b>\$1,081,504.96</b>

**INSERT BUILDING P4701 FLOOR PLANS HERE**



## Building P4702

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Building P-4702 was constructed in 1822. The 800 square foot facility contains a DVQ with a full kitchen. The building is functioning as a family suite for high ranking visitors.

### Significant Assumptions

The replacement and renovation cost models are based on 1 family suite and 1 extended stay room.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$208,160.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	113.99%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-4702 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	1
11.Operating as Extended Stay	0
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	0
15.Renovated to Family Suite	1
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation is a limestone wall on compacted soil. The foundation is in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The wood floor framing appears to be in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The sloped roof consists of wood trusses. The roof structure appears to be in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The exterior walls are structural rubble stone masonry. The walls are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The wood double hung windows are in fair condition.
- Recommendation: Remove and replace the windows.

#### **Exterior Doors**

- Analysis: The wood doors and frames are in fair condition
- Recommendation: Replace the wood doors and frames.

## **Roofing**

### **Roof Coverings**

- Analysis: The three tab asphalt shingles are in poor condition.
- Recommendation: Remove and replace the roof covering.

## **Interior Construction**

### **Partitions**

- Analysis: The interior walls are plastered load bearing rubble masonry and plaster on wood lath over wood stud framing. The walls are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in fair condition.
- Recommendation: Replace the damaged wood doors.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are painted plaster over masonry walls or painted plaster over wood lath on wood stud framing. They are in fair condition.
- Recommendation: Install vinyl wall coverings.

### **Floor Finishes**

- Analysis: The living areas and bedrooms are carpeted. The kitchen area has sheet vinyl flooring. The carpet and sheet vinyl is in fair condition.
- Recommendation: Replace the carpet and sheet vinyl.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: The bathroom has a solid surface sink with vanity, a water closet, and a built in place shower. The fixtures are in good condition. The bathroom does not have a tub.
- Recommendation: Install a bath tub.

### **Domestic Water Distribution**

- Analysis: This unit has a 50 gallon electric Bradford & White electric hot water heater in good condition. The supply and waste piping are in poor condition.
- Recommendation: Replace the supply and waste piping.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The heating is supplied by a propane fired conquest 80 furnace. There is no air conditioning.

- Recommendation: Install PTAC units.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system or a kitchen fire extinguisher located in the range hood.
- Recommendation: Install a fire sprinkler system and a hood mounted CO2 extinguisher on the kitchen stove.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The electrical service consists of a fuse box of unknown capacity in poor condition. The wiring and receptacles are in poor condition. The interior lighting and fixtures are in fair condition.
- Recommendation: Replace the electrical service, wiring and receptacles. Replace the interior lighting and fixtures.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors wired to the buildings electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site consists of grass covered yard areas and shared parking lots with access to main roads. The site is graded properly to allow for drainage. The site is in good condition.
- Recommendation: No corrective action required.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>1.98%</b>	<b>\$962.76</b>
Parking: AC Pavement Damaged or Failing		\$962.76
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.65%</b>	<b>\$3,238.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$3,238.13
<b>08 Doors &amp; Windows</b>	<b>10.14%</b>	<b>\$4,933.05</b>
Al. Windows - Beyond Useful Life		\$2,984.03
Wood Door - Beyond Useful Life		\$1,949.02
<b>09 Finishes</b>	<b>16.75%</b>	<b>\$8,151.03</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$2,569.08
Carpet: Beyond Useful Life		\$1,359.52
Sheet Vinyl: Beyond Useful Life		\$465.70
Vinyl Wall Covering: Damaged or Failing		\$3,756.73
<b>11 Equipment</b>	<b>8.13%</b>	<b>\$3,956.13</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
<b>13 Special Construction</b>	<b>12.13%</b>	<b>\$5,905.82</b>
CO2 System: Missing or Inadequate		\$2,599.00
Fire Alarm System: Missing or Inadequate		\$680.00
Fire Sprinklers: Damaged or Failing		\$2,626.82
<b>15 Mechanical</b>	<b>19.57%</b>	<b>\$9,525.01</b>
Bath tub: Replace due to remodel		\$1,790.72
Pipe, domestic water: Beyond expected useful life		\$1,750.26
PTAC: Missing or inadequate		\$5,984.03
<b>16 Electrical</b>	<b>24.65%</b>	<b>\$11,996.88</b>
Branch Circuits: Beyond Expected Useful Life		\$2,378.51
Fixtures, Incandescent: Missing or inadequate		\$3,150.25
Inadequate exterior Lighting		\$3,785.50
Main service: Beyond expected useful life		\$2,682.62
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$48,669.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$267.68
Force Protection	9.00%	\$4,842.32
General Conditions	10.00%	\$4,866.90
<b>Total Additional Hard Cost</b>		<b>\$9,976.90</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
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Contingency	10.00%	\$5,864.59
SIOH Conus	6.50%	\$4,193.18
Design	10.00%	\$5,864.59
08 MYr Inflation Fct	9.93%	\$7,404.63
<b>Total Soft Cost</b>		<b>\$23,326.99</b>
<b>Total Project</b>		<b>\$81,972.89</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>3.06%</b>	<b>\$3,785.50</b>
Site Development		\$3,785.50
<b>07 Thermal &amp; Moisture Protection</b>	<b>3.23%</b>	<b>\$3,997.19</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,806.51
<b>08 Doors &amp; Windows</b>	<b>32.50%</b>	<b>\$40,168.11</b>
Exterior Doors		\$6,966.45
Exterior Windows		\$27,120.00
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>18.39%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.14%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>6.40%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.40%</b>	<b>\$5,442.08</b>
Communications & Security		\$2,449.84
Sprinklers		\$2,992.24
<b>15 Mechanical</b>	<b>14.49%</b>	<b>\$17,910.50</b>
Cooling Generating Systems		\$7,232.00
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>9.28%</b>	<b>\$11,469.50</b>
Electrical Service & Distribution		\$7,684.00
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>8.09%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$123,588.92

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$679.74
Force Protection	9.00%	\$12,296.48
General Conditions	10.00%	\$12,358.89
<b>Total Additional Hard Cost</b>		<b>\$25,335.11</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$14,892.40
SIOH Conus	6.50%	\$10,648.07

Design	10.00%	\$14,892.40
08 MYr Inflation Fct	9.93%	\$18,803.14
<b>Total Soft Cost</b>		<b>\$59,236.01</b>
<b>Total Project Cost for Renovation</b>		<b>\$208,160.05</b>

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING P4702 FLOOR PLAN HERE**



## Building T2251

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Building T-2251 was constructed in 1944. The 969 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 1 family suite and 1 extended stay room .

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$167,375.00
Replacement Cost	\$208,210.00
Renovation to Replacement Cost Ratio	80.39%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2251 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required

#### **Slab on Grade**

- Analysis: The mechanical room consists of a concrete slab on grade . The floor is in good condition.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over the wood siding is in fair condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The walls have a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the guest rooms and public areas. It is in fair condition. The bathrooms have ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

### **Ceiling Finishes**

- Analysis: The ceiling finish is an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: This unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individually controlled electrical exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioner.

## **Fire Protection**

### **Sprinklers**

- Analysis: No fire sprinklers exist.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring and receptacles are in fair condition. The lighting is in fair condition.
- Recommendation: Replace the branch circuits, wiring, and receptacles. Replace the interior lighting.

### **Communications and Security**

- Analysis: There are no hard wired smoke detectors in the building.
- Recommendation: Install smoke detectors.

## **Furnishings**

### **Fixed Furnishings**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in fair condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>8.74%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.50%</b>	<b>\$3,957.71</b>
Asphalt Shingle Roof: Beyond Useful Life		\$3,957.71
<b>09 Finishes</b>	<b>26.96%</b>	<b>\$14,221.50</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$4,015.50
Carpet: Beyond Useful Life		\$2,567.87
Floor Tile: Damaged or Failing		\$1,936.85
Vinyl Wall Covering: Damaged or Failing		\$5,701.28
<b>11 Equipment</b>	<b>7.50%</b>	<b>\$3,956.13</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
<b>13 Special Construction</b>	<b>10.13%</b>	<b>\$5,343.44</b>
Fire Sprinklers: Damaged or Failing		\$4,493.44
Smoke detector: Damaged or Failing		\$850.00
<b>15 Mechanical</b>	<b>14.74%</b>	<b>\$7,774.75</b>
PTAC: Missing or inadequate		\$5,984.03
Tub: Damaged or failing		\$1,790.72
<b>16 Electrical</b>	<b>24.43%</b>	<b>\$12,890.48</b>
Branch Circuits: Beyond Expected Useful Life		\$4,415.48
Fixtures, Incandescent: Missing or inadequate		\$4,689.50
Pole mounted fixture: Missing or inadequate		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$52,755.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$290.15
Force Protection	9.00%	\$5,248.86
General Conditions	10.00%	\$5,275.50
<b>Total Additional Hard Cost</b>		<b>\$10,814.51</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$6,356.95
SIOH Conus	6.50%	\$4,545.22
Design	10.00%	\$6,356.95
08 MYr Inflation Fct	9.93%	\$8,026.28
<b>Total Soft Cost</b>		<b>\$25,285.41</b>
<b>Total Project</b>		<b>\$88,854.92</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.64%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.91%</b>	<b>\$4,877.15</b>
Roof Construction		\$1,640.22
Roof Coverings		\$3,236.93
<b>08 Doors &amp; Windows</b>	<b>6.59%</b>	<b>\$6,549.48</b>
Interior Doors		\$6,549.48
<b>09 Finishes</b>	<b>28.59%</b>	<b>\$28,412.19</b>
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
<b>10 Specialties</b>	<b>0.18%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>7.96%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>6.63%</b>	<b>\$6,591.72</b>
Communications & Security		\$2,967.37
Sprinklers		\$3,624.35
<b>15 Mechanical</b>	<b>20.58%</b>	<b>\$20,455.26</b>
Cooling Generating Systems		\$8,759.76
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>13.18%</b>	<b>\$13,092.75</b>
Electrical Service & Distribution		\$9,307.25
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>6.74%</b>	<b>\$6,700.00</b>
Interior FF&E allowance		\$6,700.00
Total Raw Cost	100.00%	\$99,374.94

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$546.56
Force Protection	9.00%	\$9,887.31
General Conditions	10.00%	\$9,937.49
<b>Total Additional Hard Cost</b>		<b>\$20,371.37</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$11,974.63
SIOH Conus	6.50%	\$8,561.86
Design	10.00%	\$11,974.63
08 MYr Inflation Fct	9.93%	\$15,119.16

Total Soft Cost	\$47,630.29
Total Project Cost for Renovation	\$167,376.60

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.05%</b>	<b>\$7,103.46</b>
Site Earthwork		\$7,103.46
<b>03 Concrete</b>	<b>11.27%</b>	<b>\$15,849.40</b>
Floor Construction		\$8,092.44
Slab on Grade		\$3,231.31
Standard Foundations		\$4,525.65
<b>04 Masonry</b>	<b>15.65%</b>	<b>\$22,005.81</b>
Exterior Walls		\$22,005.81
<b>07 Thermal &amp; Moisture Protection</b>	<b>3.12%</b>	<b>\$4,390.71</b>
Roof Construction		\$1,830.06
Roof Coverings		\$2,560.65
<b>08 Doors &amp; Windows</b>	<b>15.79%</b>	<b>\$22,201.11</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,742.56
<b>09 Finishes</b>	<b>14.74%</b>	<b>\$20,726.18</b>
Ceiling Finishes		\$2,645.42
Floor Finishes		\$7,127.01
Partitions		\$6,662.55
Wall Finishes		\$4,291.20
<b>12 Furnishings</b>	<b>5.62%</b>	<b>\$7,910.00</b>
Fixed Furnishings		\$7,910.00
<b>13 Special Construction</b>	<b>3.29%</b>	<b>\$4,625.21</b>
Communications & Security		\$1,629.23
Sprinklers		\$2,995.98
<b>15 Mechanical</b>	<b>12.26%</b>	<b>\$17,241.54</b>
Cooling Generating Systems		\$7,241.04
Domestic Water Dist		\$3,390.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>6.10%</b>	<b>\$8,578.96</b>
Electrical Service & Distribution		\$8,578.96
<b>19 FF&amp;E</b>	<b>7.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$140,632.39</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$773.48
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$14,063.24
<b>Total Additional Hard Cost</b>		<b>\$14,836.72</b>

### Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$7,773.46
SIOH Conus	6.50%	\$10,610.77
Design	10.00%	\$15,546.91
08 MYr Inflation Fct	9.93%	\$18,807.44
<b>Total Soft Cost</b>		<b>\$52,738.58</b>
<b>Total Project Cost for Replacement</b>		<b>\$208,207.68</b>

**INSERT BUILDING T2251 FLOOR PLAN HERE**



## Building T2252

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Building T-2252 was constructed in 1944. The 969 square foot facility contains a family suite with a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 1 family suite and 1 extended stay room.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$167,375.00
Replacement Cost	\$208,210.00
Renovation to Replacement Cost Ratio	80.39%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2252 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	0
07.Multi Room w/ Full Kitchen	1
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	1
15.Renovated to Family Suite	1
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of wood beams on concrete piers. The system is in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction in this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition.
- Recommendation: Apply exterior stain to the exposed wood elements on the front porch.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

### **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

### **Interior Construction**

#### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

#### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

### **Interior Finishes**

#### **Wall Finishes**

- Analysis: The interior walls have a combination of painted drywall and vinyl wall covering over drywall. The painted areas are in good condition. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

#### **Floor Finishes**

- Analysis: The carpet is located in the bedrooms and living areas. It is in fair condition. The bathrooms have ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

#### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

### **Plumbing**

#### **Plumbing Fixtures**

- Analysis: This unit has an individual rest room containing a lavatory with vanity, a water closet and a built in place shower. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

#### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

### **HVAC**

#### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install packaged terminal heat pump units with individual thermostat controls in each room.

## **Fire Protection**

### **Sprinklers**

- Analysis: No fire sprinklers exist.
- Recommendation: Install a fire sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring, and receptacles are in fair condition. The interior lighting is in fair condition.
- Recommendation: Replace the branch circuits and interior lighting.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors wired to the buildings electrical system.

## **Furnishings**

### **Fixed Furnishings**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in fair condition with minor erosion evident around building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 1 family suite and 1 extended stay room. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>10.07%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>5.50%</b>	<b>\$2,518.54</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,518.54
<b>09 Finishes</b>	<b>28.34%</b>	<b>\$12,972.94</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$3,412.53
Carpet: Beyond Useful Life		\$1,888.39
Covered Walkway Ceiling: Paint Failing		\$144.00
Exterior Wood Stain Finish: Failing		\$310.26
Floor Tile: Damaged or Failing		\$2,188.38
Vinyl Wall Covering: Damaged or Failing		\$5,029.38
<b>11 Equipment</b>	<b>8.64%</b>	<b>\$3,956.13</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
<b>13 Special Construction</b>	<b>11.19%</b>	<b>\$5,123.33</b>
Fire Sprinklers: Beyond Useful Life		\$4,304.78
Smoke detector: Damaged or Failing		\$818.55
<b>15 Mechanical</b>	<b>9.81%</b>	<b>\$4,489.61</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$2,698.89
<b>16 Electrical</b>	<b>26.45%</b>	<b>\$12,109.57</b>
Branch Circuits: Beyond Expected Useful Life		\$3,809.99
Fixtures, Incandescent: Missing or inadequate		\$4,514.08
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$45,781.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$251.80
Force Protection	9.00%	\$4,554.98
General Conditions	10.00%	\$4,578.10
<b>Total Additional Hard Cost</b>		<b>\$9,384.88</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$5,516.59
SIOH Conus	6.50%	\$3,944.36
Design	10.00%	\$5,516.59
08 MYr Inflation Fct	9.93%	\$6,965.24
<b>Total Soft Cost</b>		<b>\$21,942.78</b>

**Total Project**

**\$77,108.65**

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.64%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.91%</b>	<b>\$4,877.15</b>
Roof Construction		\$1,640.22
Roof Coverings		\$3,236.93
<b>08 Doors &amp; Windows</b>	<b>6.59%</b>	<b>\$6,549.48</b>
Interior Doors		\$6,549.48
<b>09 Finishes</b>	<b>28.59%</b>	<b>\$28,412.19</b>
Ceiling Finishes		\$5,179.07
Floor Finishes		\$7,444.81
Partitions		\$5,971.42
Wall Finishes		\$9,816.90
<b>10 Specialties</b>	<b>0.18%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>7.96%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>6.63%</b>	<b>\$6,591.72</b>
Communications & Security		\$2,967.37
Sprinklers		\$3,624.35
<b>15 Mechanical</b>	<b>20.58%</b>	<b>\$20,455.26</b>
Cooling Generating Systems		\$8,759.76
Domestic Water Dist		\$5,085.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>13.18%</b>	<b>\$13,092.75</b>
Electrical Service & Distribution		\$9,307.25
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>6.74%</b>	<b>\$6,700.00</b>
Interior FF&E allowance		\$6,700.00
Total Raw Cost	100.00%	\$99,374.94

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$546.56
Force Protection	9.00%	\$9,887.31
General Conditions	10.00%	\$9,937.49
<b>Total Additional Hard Cost</b>		<b>\$20,371.37</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$11,974.63
SIOH Conus	6.50%	\$8,561.86
Design	10.00%	\$11,974.63
08 MYr Inflation Fct	9.93%	\$15,119.16

Total Soft Cost	\$47,630.29
Total Project Cost for Renovation	\$167,376.60

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.05%</b>	<b>\$7,103.46</b>
Site Earthwork		\$7,103.46
<b>03 Concrete</b>	<b>11.27%</b>	<b>\$15,849.40</b>
Floor Construction		\$8,092.44
Slab on Grade		\$3,231.31
Standard Foundations		\$4,525.65
<b>04 Masonry</b>	<b>15.65%</b>	<b>\$22,005.81</b>
Exterior Walls		\$22,005.81
<b>07 Thermal &amp; Moisture Protection</b>	<b>3.12%</b>	<b>\$4,390.71</b>
Roof Construction		\$1,830.06
Roof Coverings		\$2,560.65
<b>08 Doors &amp; Windows</b>	<b>15.79%</b>	<b>\$22,201.11</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,742.56
<b>09 Finishes</b>	<b>14.74%</b>	<b>\$20,726.18</b>
Ceiling Finishes		\$2,645.42
Floor Finishes		\$7,127.01
Partitions		\$6,662.55
Wall Finishes		\$4,291.20
<b>12 Furnishings</b>	<b>5.62%</b>	<b>\$7,910.00</b>
Fixed Furnishings		\$7,910.00
<b>13 Special Construction</b>	<b>3.29%</b>	<b>\$4,625.21</b>
Communications & Security		\$1,629.23
Sprinklers		\$2,995.98
<b>15 Mechanical</b>	<b>12.26%</b>	<b>\$17,241.54</b>
Cooling Generating Systems		\$7,241.04
Domestic Water Dist		\$3,390.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>6.10%</b>	<b>\$8,578.96</b>
Electrical Service & Distribution		\$8,578.96
<b>19 FF&amp;E</b>	<b>7.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$140,632.39</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$773.48
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$14,063.24
<b>Total Additional Hard Cost</b>		<b>\$14,836.72</b>

### Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$7,773.46
SIOH Conus	6.50%	\$10,610.77
Design	10.00%	\$15,546.91
08 MYr Inflation Fct	9.93%	\$18,807.44
<b>Total Soft Cost</b>		<b>\$52,738.58</b>
<b>Total Project Cost for Replacement</b>		<b>\$208,207.68</b>

**INSERT BUILDING T2252 FLOOR PLAN HERE**



## Building T2253

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Building T-2253 was constructed in 1944. The 607 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$143,080.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	78.35%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2253 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over the wood siding is in good condition. The wooden porch elements require minor maintenance.
- Recommendation: Restain the wood porch elements.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the bedrooms and living areas. It is in fair condition. The bathrooms have ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: This unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install a new bathtub.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: No fire sprinklers exist.
- Recommendation: Install a fire sprinklers.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring and receptacles are in fair condition. The interior lighting system is in fair condition.
- Recommendation: Replace the branch circuits and interior lighting.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install hard-wired smoke detectors.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in fair condition with minor erosion that is evident around building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>12.30%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.42%</b>	<b>\$2,407.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,407.13
<b>09 Finishes</b>	<b>18.22%</b>	<b>\$6,832.05</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,806.33
Carpet: Beyond Useful Life		\$1,238.77
Covered Walkway Ceiling: Paint Failing		\$96.01
Exterior Wood Stain Finish: Failing		\$169.23
Floor Tile: Damaged or Failing		\$503.08
Vinyl Wall Covering: Damaged or Failing		\$3,018.63
<b>11 Equipment</b>	<b>14.32%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>8.67%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>15.42%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>24.65%</b>	<b>\$9,239.35</b>
Branch Circuits: Beyond Expected Useful Life		\$2,584.97
Fixtures, Incandescent: Missing or inadequate		\$2,868.88
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$37,489.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$206.19
Force Protection	9.00%	\$3,729.97
General Conditions	10.00%	\$3,748.90
<b>Total Additional Hard Cost</b>		<b>\$7,685.06</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,517.41
SIOH Conus	6.50%	\$3,229.95
Design	10.00%	\$4,517.41
08 MYr Inflation Fct	9.93%	\$5,703.67

Total Soft Cost	\$17,968.43
Total Project	\$63,142.49

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.43%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.16%</b>	<b>\$3,531.27</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,340.59
<b>08 Doors &amp; Windows</b>	<b>7.16%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.76%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.21%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.31%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.86%</b>	<b>\$4,129.18</b>
Communications & Security		\$1,858.82
Sprinklers		\$2,270.36
<b>15 Mechanical</b>	<b>19.03%</b>	<b>\$16,165.78</b>
Cooling Generating Systems		\$5,487.28
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.32%</b>	<b>\$9,615.74</b>
Electrical Service & Distribution		\$5,830.24
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.77%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$84,950.80

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$467.23
Force Protection	9.00%	\$8,452.18
General Conditions	10.00%	\$8,495.08
<b>Total Additional Hard Cost</b>		<b>\$17,414.49</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,236.53
SIOH Conus	6.50%	\$7,319.12
Design	10.00%	\$10,236.53
08 MYr Inflation Fct	9.93%	\$12,924.64

Total Soft Cost	\$40,716.81
Total Project Cost for Renovation	\$143,082.10

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2253 FLOOR PLAN HERE**



## Building T2254

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Building T-2254 was constructed in 1944. The 607 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$143,080.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	78.35%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2254 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in good condition. The wooden porch elements require minor maintenance.
- Recommendation: Restain the wooden porch elements.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the bedrooms and living areas. It is in fair condition. The bathrooms have ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individually controlled electrical exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: No fire sprinklers exist.
- Recommendation: Install a fire sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring and receptacles are in fair condition. The interior lighting is in fair condition.
- Recommendation: Replace the branch circuits and interior lighting.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors that are wired to the buildings' electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion that is evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>12.33%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.44%</b>	<b>\$2,407.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,407.13
<b>09 Finishes</b>	<b>18.01%</b>	<b>\$6,736.04</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,806.33
Carpet: Beyond Useful Life		\$1,238.77
Exterior Wood Stain Finish: Failing		\$169.23
Floor Tile: Damaged or Failing		\$503.08
Vinyl Wall Covering: Damaged or Failing		\$3,018.63
<b>11 Equipment</b>	<b>14.36%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>8.69%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>15.46%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>24.71%</b>	<b>\$9,239.35</b>
Branch Circuits: Beyond Expected Useful Life		\$2,584.97
Fixtures, Incandescent: Missing or inadequate		\$2,868.88
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$37,393.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$205.66
Force Protection	9.00%	\$3,720.42
General Conditions	10.00%	\$3,739.30
<b>Total Additional Hard Cost</b>		<b>\$7,665.38</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,505.84
SIOH Conus	6.50%	\$3,221.67
Design	10.00%	\$4,505.84
08 MYr Inflation Fct	9.93%	\$5,689.07
<b>Total Soft Cost</b>		<b>\$17,922.42</b>

**Total Project**

**\$62,980.80**

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.43%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.16%</b>	<b>\$3,531.27</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,340.59
<b>08 Doors &amp; Windows</b>	<b>7.16%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.76%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.21%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.31%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.86%</b>	<b>\$4,129.18</b>
Communications & Security		\$1,858.82
Sprinklers		\$2,270.36
<b>15 Mechanical</b>	<b>19.03%</b>	<b>\$16,165.78</b>
Cooling Generating Systems		\$5,487.28
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.32%</b>	<b>\$9,615.74</b>
Electrical Service & Distribution		\$5,830.24
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.77%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$84,950.80

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$467.23
Force Protection	9.00%	\$8,452.18
General Conditions	10.00%	\$8,495.08
<b>Total Additional Hard Cost</b>		<b>\$17,414.49</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,236.53
SIOH Conus	6.50%	\$7,319.12
Design	10.00%	\$10,236.53
08 MYr Inflation Fct	9.93%	\$12,924.64

Total Soft Cost	\$40,716.81
Total Project Cost for Renovation	\$143,082.10

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2254 FLOOR PLAN HERE**



## Building T2255

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Building T-2255 was constructed in 1944. The 607 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$143,080.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	78.35%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2255 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are plaster on wood lath over wood stud framing. The walls are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: This lodging unit is currently undergoing major renovation. The interior finishes will be in "like new" condition when the project is completed.
- Recommendation: No corrective action required.

### **Floor Finishes**

- Analysis: This lodging unit is currently undergoing major renovation. The floor finishes will be in "like new" condition at the completion of the project.
- Recommendation: No corrective action required.

### **Ceiling Finishes**

- Analysis: This lodging unit is currently undergoing major renovation. The ceiling finishes will be in "like new" condition at the completion of the project.
- Recommendation: No corrective action required.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition.
- Recommendation: No corrective action required.

### **Communications and Security**

- Analysis: There is no smoke detectors in the building.
- Recommendation: Install smoke detectors.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>23.25%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>12.14%</b>	<b>\$2,407.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,407.13
<b>13 Special Construction</b>	<b>16.39%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>29.14%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>19.08%</b>	<b>\$3,785.50</b>
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$19,835.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$109.09
Force Protection	9.00%	\$1,973.48
General Conditions	10.00%	\$1,983.50
<b>Total Additional Hard Cost</b>		<b>\$4,066.08</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$2,390.11
SIOH Conus	6.50%	\$1,708.93
Design	10.00%	\$2,390.11
08 MYr Inflation Fct	9.93%	\$3,017.75
<b>Total Soft Cost</b>		<b>\$9,506.89</b>
<b>Total Project</b>		<b>\$33,407.97</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.43%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.16%</b>	<b>\$3,531.27</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,340.59
<b>08 Doors &amp; Windows</b>	<b>7.16%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.76%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.21%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.31%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.86%</b>	<b>\$4,129.18</b>
Communications & Security		\$1,858.82
Sprinklers		\$2,270.36
<b>15 Mechanical</b>	<b>19.03%</b>	<b>\$16,165.78</b>
Cooling Generating Systems		\$5,487.28
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.32%</b>	<b>\$9,615.74</b>
Electrical Service & Distribution		\$5,830.24
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.77%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$84,950.80

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$467.23
Force Protection	9.00%	\$8,452.18
General Conditions	10.00%	\$8,495.08
<b>Total Additional Hard Cost</b>		<b>\$17,414.49</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,236.53
SIOH Conus	6.50%	\$7,319.12
Design	10.00%	\$10,236.53
08 MYr Inflation Fct	9.93%	\$12,924.64

Total Soft Cost	\$40,716.81
Total Project Cost for Renovation	\$143,082.10

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2255 FLOOR PLAN HERE**



## Building T2256

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Building T-2256 was constructed in 1944. The 607 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$143,080.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	78.35%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2256 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition. The front porch has a wood planked floor that is in poor condition.
- Recommendation: Replace the front porch deck.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition. The wooden porch elements require minor maintenance.
- Recommendation: Apply stain to wooden the porch elements.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the bedrooms and living areas. It is in good condition. The bathroom has ceramic tile floors that are in poor condition.
- Recommendation: Replace the floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: This unit has an individual rest room containing a new lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in fair condition.
- Recommendation: Install new bathtubs and water closets.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: No sprinkler system is installed.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. Branch circuits, wiring, and receptacles are in fair condition. Interior lighting and fixtures are in fair condition.
- Recommendation: Replace the branch circuits, interior lighting and fixtures.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors that are wired to the buildings electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>11.82%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.17%</b>	<b>\$2,407.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,407.13
<b>09 Finishes</b>	<b>18.51%</b>	<b>\$7,219.46</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,806.33
Covered Walkway Ceiling: Paint Failing		\$96.01
Exterior Wood Stain Finish: Failing		\$169.23
Floor Tile: Damaged or Failing		\$503.08
Vinyl Wall Covering: Damaged or Failing		\$3,018.63
Wood Flooring: Damaged or Failing		\$1,626.18
<b>11 Equipment</b>	<b>13.77%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>8.34%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>17.69%</b>	<b>\$6,899.79</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
Water closet: Replace due to remodel		\$1,119.72
<b>16 Electrical</b>	<b>23.69%</b>	<b>\$9,239.35</b>
Branch Circuits: Beyond Expected Useful Life		\$2,584.97
Fixtures, Incandescent: Missing or inadequate		\$2,868.88
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$38,997.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$214.48
Force Protection	9.00%	\$3,880.01
General Conditions	10.00%	\$3,899.70
<b>Total Additional Hard Cost</b>		<b>\$7,994.19</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,699.12
SIOH Conus	6.50%	\$3,359.87
Design	10.00%	\$4,699.12
08 MYr Inflation Fct	9.93%	\$5,933.11

Total Soft Cost	\$18,691.21
Total Project	\$65,682.40

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.43%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.16%</b>	<b>\$3,531.27</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,340.59
<b>08 Doors &amp; Windows</b>	<b>7.16%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.76%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.21%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.31%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.86%</b>	<b>\$4,129.18</b>
Communications & Security		\$1,858.82
Sprinklers		\$2,270.36
<b>15 Mechanical</b>	<b>19.03%</b>	<b>\$16,165.78</b>
Cooling Generating Systems		\$5,487.28
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.32%</b>	<b>\$9,615.74</b>
Electrical Service & Distribution		\$5,830.24
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.77%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$84,950.80

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$467.23
Force Protection	9.00%	\$8,452.18
General Conditions	10.00%	\$8,495.08
<b>Total Additional Hard Cost</b>		<b>\$17,414.49</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,236.53
SIOH Conus	6.50%	\$7,319.12
Design	10.00%	\$10,236.53
08 MYr Inflation Fct	9.93%	\$12,924.64

Total Soft Cost	\$40,716.81
Total Project Cost for Renovation	\$143,082.10

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2256 FLOOR PLAN HERE**



## Building T2257

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Building T-2257 was constructed in 1944. The 607 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$143,080.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	78.35%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2257 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the bedrooms and living areas. It is in fair condition. The bathroom has ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring, and receptacles are in fair condition. The interior lighting and fixtures are in fair condition.
- Recommendation: Replace the branch circuits, interior lighting and fixtures.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors that are wired to the buildings electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>12.39%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>6.47%</b>	<b>\$2,407.13</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,407.13
<b>09 Finishes</b>	<b>17.64%</b>	<b>\$6,566.81</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,806.33
Carpet: Beyond Useful Life		\$1,238.77
Floor Tile: Damaged or Failing		\$503.08
Vinyl Wall Covering: Damaged or Failing		\$3,018.63
<b>11 Equipment</b>	<b>14.42%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>8.73%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>15.53%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>24.82%</b>	<b>\$9,239.35</b>
Branch Circuits: Beyond Expected Useful Life		\$2,584.97
Fixtures, Incandescent: Missing or inadequate		\$2,868.88
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$37,224.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$204.73
Force Protection	9.00%	\$3,703.60
General Conditions	10.00%	\$3,722.40
<b>Total Additional Hard Cost</b>		<b>\$7,630.73</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,485.47
SIOH Conus	6.50%	\$3,207.11
Design	10.00%	\$4,485.47
08 MYr Inflation Fct	9.93%	\$5,663.36
<b>Total Soft Cost</b>		<b>\$17,841.42</b>
<b>Total Project</b>		<b>\$62,696.15</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>5.43%</b>	<b>\$4,611.13</b>
Site Development		\$4,611.13
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.16%</b>	<b>\$3,531.27</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,340.59
<b>08 Doors &amp; Windows</b>	<b>7.16%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.76%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.21%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.31%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>4.86%</b>	<b>\$4,129.18</b>
Communications & Security		\$1,858.82
Sprinklers		\$2,270.36
<b>15 Mechanical</b>	<b>19.03%</b>	<b>\$16,165.78</b>
Cooling Generating Systems		\$5,487.28
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.32%</b>	<b>\$9,615.74</b>
Electrical Service & Distribution		\$5,830.24
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.77%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$84,950.80

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$467.23
Force Protection	9.00%	\$8,452.18
General Conditions	10.00%	\$8,495.08
<b>Total Additional Hard Cost</b>		<b>\$17,414.49</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,236.53
SIOH Conus	6.50%	\$7,319.12
Design	10.00%	\$10,236.53
08 MYr Inflation Fct	9.93%	\$12,924.64

Total Soft Cost	\$40,716.81
Total Project Cost for Renovation	\$143,082.10

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2257 FLOOR PLAN HERE**



## Building T2258

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Building T-2258 was constructed in 1944. The 672 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$144,740.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	79.26%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2258 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The wood double-hung windows with aluminum storm windows are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in bedrooms and living areas. It is in fair condition. The bathroom has ceramic tile floors that are in poor condition.
- Recommendation: Replace the floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with an acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The GE 100 amp main breaker electrical service is in good condition. The branch circuits, wiring and receptacles are in fair condition. The interior lighting and fixtures are in fair condition.
- Recommendation: Replace the branch circuits, interior lighting and fixtures.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors that are wired to the buildings electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>12.78%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.67%</b>	<b>\$2,766.92</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,766.92
<b>09 Finishes</b>	<b>14.03%</b>	<b>\$5,060.51</b>
Carpet: Beyond Useful Life		\$1,238.77
Floor Tile: Damaged or Failing		\$503.08
Interior ceilings: Paint Failing		\$300.03
Vinyl Wall Covering: Damaged or Failing		\$3,018.63
<b>11 Equipment</b>	<b>14.88%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>9.01%</b>	<b>\$3,251.09</b>
Fire Sprinklers: Beyond Useful Life		\$2,730.89
Smoke detector: Damaged or Failing		\$520.20
<b>15 Mechanical</b>	<b>16.02%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>25.61%</b>	<b>\$9,239.35</b>
Branch Circuits: Beyond Expected Useful Life		\$2,584.97
Fixtures, Incandescent: Missing or inadequate		\$2,868.88
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$36,078.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$198.43
Force Protection	9.00%	\$3,589.58
General Conditions	10.00%	\$3,607.80
<b>Total Additional Hard Cost</b>		<b>\$7,395.81</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,347.38
SIOH Conus	6.50%	\$3,108.38
Design	10.00%	\$4,347.38
08 MYr Inflation Fct	9.93%	\$5,489.00
<b>Total Soft Cost</b>		<b>\$17,292.14</b>
<b>Total Project</b>		<b>\$60,765.95</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.41%</b>	<b>\$3,785.50</b>
Site Development		\$3,785.50
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.29%</b>	<b>\$3,688.02</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,497.34
<b>08 Doors &amp; Windows</b>	<b>7.08%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.45%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.20%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.20%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>5.32%</b>	<b>\$4,571.35</b>
Communications & Security		\$2,057.87
Sprinklers		\$2,513.48
<b>15 Mechanical</b>	<b>19.50%</b>	<b>\$16,753.38</b>
Cooling Generating Systems		\$6,074.88
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.92%</b>	<b>\$10,240.06</b>
Electrical Service & Distribution		\$6,454.56
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.64%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$85,936.00

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$472.65
Force Protection	9.00%	\$8,550.20
General Conditions	10.00%	\$8,593.60
<b>Total Additional Hard Cost</b>		<b>\$17,616.45</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,355.25
SIOH Conus	6.50%	\$7,404.00
Design	10.00%	\$10,355.25
08 MYr Inflation Fct	9.93%	\$13,074.53

Total Soft Cost	\$41,189.02
Total Project Cost for Renovation	\$144,741.47

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2258 FLOOR PLAN HERE**



## Building T2259

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Building T-2259 was constructed in 1944. The 672 square foot facility contains a family suite without a full kitchen. The building is functioning as a family suite.

### Significant Assumptions

The replacement and renovation cost models are based on 2 extended stay rooms.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$144,740.00
Replacement Cost	\$182,615.00
Renovation to Replacement Cost Ratio	79.26%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2259 is not recommended.

## Attributes

01.Number of Units Constructed	1
02.Number of Units Used	1
03.Back of House Function	No
04.Single Room w/o FullKitchen	0
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	1
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	1
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	2
15.Renovated to Family Suite	0
16.Delta renovation	1

## **Condition Analysis/Recommendation**

### **Unknown**

#### **FF&E Allowance**

- Analysis: Guest Rooms: The hard goods consist of a head board, night stand, dresser in each bedroom, a couch, easy chair, coffee table, end table, desk and entertainment shelf unit in the living rooms. They are in good condition. The soft goods consists of drapes and blinds on the windows, TV, mattress and box springs and bed coverings. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The foundation consists of concrete piers and they are in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The mechanical room consists of a concrete slab on grade while the building has a wood floor above a crawl space. The floor is in good condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The wood frame sloped roof is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical metal siding over wood siding is in fair condition
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The aluminum double-hung windows are in good condition
- Recommendation: No corrective action required.

#### **Exterior Doors**

- Analysis: The metal clad doors are in good condition.
- Recommendation: No corrective action required.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt shingles are in poor condition.
- Recommendation: Replace the asphalt shingles.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. The interior doors are in good condition.
- Recommendation: No corrective action required.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in bedrooms and living areas. It is in fair condition. The bathroom has ceramic tile floors that are in poor condition.
- Recommendation: Replace floor tile. Replace the carpet.

### **Ceiling Finishes**

- Analysis: The ceilings are a combination of acoustical tile and grid system and painted drywall. The acoustical tile system is in fair condition. The painted drywall is in fair condition.
- Recommendation: Replace the acoustical tile and grid system. Paint the drywall ceiling.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.
- Recommendation: Install new bathtubs.

### **Domestic Water Distribution**

- Analysis: The 30 gallon gas fired Rheem hot water heater and the waste and supply piping are in good condition.
- Recommendation: No corrective action required.

## **HVAC**

### **Cooling Generating Systems**

- Analysis: The gas fired forced air Trane high efficiency furnace is in good condition. There is no air conditioning.
- Recommendation: Install an air conditioning system.

## **Fire Protection**

### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

## **Electrical**

### **Electrical Service/Distribution**

- Analysis: The Murray 150 amp main breaker electrical service is in good condition. The branch circuits, wiring, and receptacles are in fair condition. The interior lighting and fixtures are in fair condition.
- Recommendation: Replace the branch circuits, interior lighting and fixtures.

### **Communications and Security**

- Analysis: There are no smoke detectors in the building.
- Recommendation: Install smoke detectors that are wired to the buildings electrical system.

## **Equipment**

### **Other Equipment**

- Analysis:
- Recommendation:

## **Site Preparation**

### **Site Earthwork**

- Analysis: The site is in good condition with minor erosion evident around the building.
- Recommendation: Regrade and landscape around the building.

## **Major Functional Criteria**

### **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Extended Stay Guest Room**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 2 extended stay rooms. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>12.47%</b>	<b>\$4,611.14</b>
Poor Drainage: Landscape Areas		\$4,611.14
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.48%</b>	<b>\$2,766.92</b>
Asphalt Shingle Roof: Beyond Useful Life		\$2,766.92
<b>09 Finishes</b>	<b>17.68%</b>	<b>\$6,538.64</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$1,678.18
Carpet: Beyond Useful Life		\$1,262.86
Floor Tile: Damaged or Failing		\$754.61
Interior ceilings: Paint Failing		\$50.00
Vinyl Wall Covering: Damaged or Failing		\$2,792.99
<b>11 Equipment</b>	<b>14.51%</b>	<b>\$5,368.63</b>
Unit Kitchen: Beyond Useful Life		\$3,956.13
Washing Machine: Beyond expected useful life.		\$1,412.50
<b>13 Special Construction</b>	<b>8.64%</b>	<b>\$3,196.01</b>
Fire Sprinklers: Missing or Inadequate		\$2,686.01
Smoke detector: Damaged or Failing		\$510.00
<b>15 Mechanical</b>	<b>15.63%</b>	<b>\$5,780.07</b>
Bath tub: Replace due to remodel		\$1,790.72
PTAC: Missing or inadequate		\$3,989.35
<b>16 Electrical</b>	<b>23.59%</b>	<b>\$8,726.43</b>
Branch Circuits: Beyond Expected Useful Life		\$2,127.23
Fixtures, Incandescent: Missing or inadequate		\$2,813.70
Inadequate exterior Lighting		\$3,785.50
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$36,988.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$203.43
Force Protection	9.00%	\$3,680.12
General Conditions	10.00%	\$3,698.80
<b>Total Additional Hard Cost</b>		<b>\$7,582.36</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$4,457.04
SIOH Conus	6.50%	\$3,186.78
Design	10.00%	\$4,457.04
08 MYr Inflation Fct	9.93%	\$5,627.45
<b>Total Soft Cost</b>		<b>\$17,728.30</b>

**Total Project**

**\$62,298.66**

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.41%</b>	<b>\$3,785.50</b>
Site Development		\$3,785.50
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.29%</b>	<b>\$3,688.02</b>
Roof Construction		\$1,190.68
Roof Coverings		\$2,497.34
<b>08 Doors &amp; Windows</b>	<b>7.08%</b>	<b>\$6,081.66</b>
Interior Doors		\$6,081.66
<b>09 Finishes</b>	<b>26.45%</b>	<b>\$22,730.78</b>
Ceiling Finishes		\$4,143.26
Floor Finishes		\$6,939.71
Partitions		\$4,334.81
Wall Finishes		\$7,313.00
<b>10 Specialties</b>	<b>0.20%</b>	<b>\$175.26</b>
Fittings		\$175.26
<b>11 Equipment</b>	<b>9.20%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>5.32%</b>	<b>\$4,571.35</b>
Communications & Security		\$2,057.87
Sprinklers		\$2,513.48
<b>15 Mechanical</b>	<b>19.50%</b>	<b>\$16,753.38</b>
Cooling Generating Systems		\$6,074.88
Domestic Water Dist		\$4,068.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>11.92%</b>	<b>\$10,240.06</b>
Electrical Service & Distribution		\$6,454.56
Site Lighting		\$3,785.50
<b>19 FF&amp;E</b>	<b>11.64%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
Total Raw Cost	100.00%	\$85,936.00

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$472.65
Force Protection	9.00%	\$8,550.20
General Conditions	10.00%	\$8,593.60
<b>Total Additional Hard Cost</b>		<b>\$17,616.45</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$10,355.25
SIOH Conus	6.50%	\$7,404.00
Design	10.00%	\$10,355.25
08 MYr Inflation Fct	9.93%	\$13,074.53

Total Soft Cost	\$41,189.02
Total Project Cost for Renovation	\$144,741.47

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.65%</b>	<b>\$5,737.29</b>
Site Earthwork		\$5,737.29
<b>03 Concrete</b>	<b>9.59%</b>	<b>\$11,823.08</b>
Floor Construction		\$5,576.83
Slab on Grade		\$2,601.99
Standard Foundations		\$3,644.25
<b>04 Masonry</b>	<b>15.90%</b>	<b>\$19,615.73</b>
Exterior Walls		\$19,615.73
<b>07 Thermal &amp; Moisture Protection</b>	<b>2.86%</b>	<b>\$3,529.00</b>
Roof Construction		\$1,380.52
Roof Coverings		\$2,148.48
<b>08 Doors &amp; Windows</b>	<b>17.62%</b>	<b>\$21,733.29</b>
Exterior Doors		\$4,898.55
Exterior Windows		\$13,560.00
Interior Doors		\$3,274.74
<b>09 Finishes</b>	<b>13.60%</b>	<b>\$16,775.89</b>
Ceiling Finishes		\$2,125.87
Floor Finishes		\$6,684.18
Partitions		\$5,025.94
Wall Finishes		\$2,939.90
<b>11 Equipment</b>	<b>6.41%</b>	<b>\$7,910.00</b>
Other Equipment		\$7,910.00
<b>13 Special Construction</b>	<b>3.02%</b>	<b>\$3,724.42</b>
Communications & Security		\$1,311.93
Sprinklers		\$2,412.49
<b>15 Mechanical</b>	<b>12.29%</b>	<b>\$15,153.30</b>
Cooling Generating Systems		\$5,830.80
Domestic Water Dist		\$2,712.00
Plumbing Fixtures		\$6,610.50
<b>16 Electrical</b>	<b>5.95%</b>	<b>\$7,345.00</b>
Electrical Service & Distribution		\$7,345.00
<b>19 FF&amp;E</b>	<b>8.11%</b>	<b>\$10,000.00</b>
Interior FF&E allowance		\$10,000.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$123,346.99</b>

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$678.41
Force Protection	0.00%	\$0.00
General Cond	10.00%	\$12,334.70
<b>Total Additional Hard Cost</b>		<b>\$13,013.11</b>

### Soft Cost (Template: Army Lodging New Construction)

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$6,818.01
SIOH Conus	6.50%	\$9,306.58
Design	10.00%	\$13,636.01
08 MYr Inflation Fct	9.93%	\$16,495.78
<b>Total Soft Cost</b>		<b>\$46,256.38</b>
<b>Total Project Cost for Replacement</b>		<b>\$182,616.48</b>

**INSERT BUILDING T2259 FLOOR PLAN HERE**



## Building T2340

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Building T-2340 was constructed in 1944. The 7800 square foot facility contains 13 DVQs with full kitchens. The building is functioning as 13 family suites for high ranking visitors.

### Significant Assumptions

The replacement and renovation cost models are based on 13 family suites.

The renovation uses the existing foot print, with the plan reworked to meet current lodging size requirements.

The renovation cost includes all condition assessment costs.

The renovation and replacement cost models include any public or back-of-the-house spaces as outlined in the Areas and Occupancies Schedule Template included in the Appendix.

All costs are adjusted by the Area Cost Factor of 113% for Ft Drum.

### Cost Analysis

Renovation Cost	\$1,353,285.00
Replacement Cost	\$1,988,305.00
Renovation to Replacement Cost Ratio	68.06%

Because the Renovation to Replacement Cost Ratio is greater than 50%, renovation of Building T-2340 is not recommended.

## Attributes

01.Number of Units Constructed	13
02.Number of Units Used	13
03.Back of House Function	No
04.Single Room w/o FullKitchen	2
05.Single Room w/ Full Kitchen	0
06.Multi Room wo/ Full Kitchen	11
07.Multi Room w/ Full Kitchen	0
08.DVQ wo/ Full Kitchen	0
09.DVQ w/ Full Kitchen	0
10.Operating as Standard Room	0
11.Operating as Extended Stay	13
12.Operating as Family Suite	0
13.Renovated to Standard	0
14.Renovated to Extended Stay	0
15.Renovated to Family Suite	13
16.Delta renovation	0

## **Condition Analysis/Recommendation**

### **FF&E**

#### **FF&E Allowance**

- Analysis: Guest Room: The hard goods consist of head boards, night stands, dresser in each bedroom, desk w/chair, a couch, davenport, table w/chairs, easy chairs, coffee table, end tables and a TV cabinet with drawers. They are in good condition. The soft goods consist of drapes and blinds on the windows, TV and bed. They are in good condition.
- Recommendation: No corrective action required however all the FF&E would be replaced if the structure is renovated.

### **Foundations**

#### **Standard Foundations**

- Analysis: The concrete pier foundation is in good condition.
- Recommendation: No corrective action required.

#### **Slab on Grade**

- Analysis: There is no slab on grade construction on this building.
- Recommendation: No corrective action required.

### **Superstructure**

#### **Floor Construction**

- Analysis: The equipment room floor is concrete slab-on-grade and the wood floor structures at the first and second floor are in fair condition.
- Recommendation: No corrective action required.

#### **Roof Construction**

- Analysis: The sloped wood roof construction is in good condition.
- Recommendation: No corrective action required.

### **Exterior Enclosure**

#### **Exterior Walls**

- Analysis: The vertical standing seam metal walls are in good condition.
- Recommendation: No corrective action required.

#### **Exterior Windows**

- Analysis: The aluminum windows are in poor condition.
- Recommendation: Replace the exterior windows.

#### **Exterior Doors**

- Analysis: The metal clad exterior doors are in poor condition.
- Recommendation: Replace the exterior doors.

## **Roofing**

### **Roof Coverings**

- Analysis: The three-tab asphalt roof is in poor condition
- Recommendation: Replace the roofing.

## **Interior Construction**

### **Partitions**

- Analysis: The interior partitions are drywall over wood studs and are in good condition.
- Recommendation: No corrective action required.

### **Interior Doors**

- Analysis: The interior doors are solid core wood doors in wood frames. They are in fair condition.
- Recommendation: Replace the wood doors.

### **Fittings**

- Analysis: The bathroom fittings consist of a tissue holder, towel rack and medicine cabinet with mirror. The fittings are in good condition.
- Recommendation: No corrective action required.

## **Stairs**

### **Stair Construction**

- Analysis: The exterior wood stairs with ramps are in poor condition.
- Recommendation: Replace the existing steps.

## **Interior Finishes**

### **Wall Finishes**

- Analysis: The wall finishes are a combination of painted drywall and vinyl wall covering. The vinyl wall covering is in fair condition.
- Recommendation: Replace the vinyl wall covering.

### **Floor Finishes**

- Analysis: The carpet is located in the guest rooms and public areas. It is in fair condition. The bathrooms have ceramic tile floors that are in poor condition.
- Recommendation: Replace the carpet and floor tile.

### **Ceiling Finishes**

- Analysis: The ceilings are covered with a acoustical tile and grid system. The system is in fair condition.
- Recommendation: Replace the acoustical tile and grid system.

## **Plumbing**

### **Plumbing Fixtures**

- Analysis: Each unit has an individual rest room containing a lavatory and vanity, a water closet and a built in place shower and tub. The ventilation is provided by individual controlled electric exhaust units connected to venting ducts. The plumbing fixtures are in good condition.

- Recommendation: No corrective action required.

#### **Domestic Water Distribution**

- Analysis: The oil fired 100 gallon State water heater with storage tank is in good condition.
- Recommendation: No corrective action required.

#### **HVAC**

##### **Cooling Generating Systems**

- Analysis: The oil fired Weil McLain two-pipe boiler with a baseboard heat is in fair condition. There is no air conditioning.
- Recommendation: Install PTAC units.

#### **Fire Protection**

##### **Sprinklers**

- Analysis: The building does not have a sprinkler system.
- Recommendation: Install a sprinkler system.

#### **Electrical**

##### **Electrical Service/Distribution**

- Analysis: The 400 amp Cutler Hammer with bus bar and Sylvania 250 amp sub panel is in good condition. The branch circuits, wiring, and receptacles are in fair condition. The interior lighting and fixtures in fair condition.
- Recommendation: Replace the branch circuits, interior lighting and fixtures.

##### **Communications and Security**

- Analysis: A fire annunciator is installed in this building and is in poor condition.
- Recommendation: Replace the fire annunciator.

#### **Equipment**

##### **Other Equipment**

- Analysis: The guest room kitchen units consist of a sink, microwave oven, and small refrigerator. The guest laundry has two each washers and dryers. The units are in fair condition.
- Recommendation: Replace the kitchen equipment with a new unit kitchen. Replace the laundry equipment.

#### **Site Preparation**

##### **Site Earthwork**

- Analysis: The earthwork is in good condition.
- Recommendation: No corrective action required.

#### **Site Improvements**

##### **Parking Lots**

- Analysis: The 15 parking spaces are in fair condition.
- Recommendation: Replace the asphalt parking.

## **Site Electrical Utilities**

### **Site Lighting**

- Analysis: There is no site lighting.
- Recommendation: Install new poles and lights.

## **Major Functional Criteria**

- **Major Functional Criteria Analysis**

The following are existing conditions that do not meet the Functional Criteria and are considered major deficits. Listed are the recommendations or solutions for remedying each deficit.

- **Back-of-House Spaces**

Most of the back-of-the-house spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

- **Family Guest Suite**

Room Size and Configuration: The rooms do not meet size and configuration requirements.

Recommendation: A Renovation Cost estimate is used to indicate a total redo of the building into 13 family suites. This renovation will cost more than 50% of the building's replacement cost.

- **Public Spaces**

Most of the public spaces are required at the main lodging building on post. Presently these are located in Building 4205 and are not included in this building.

## Condition Assessment/Renovation/Replacement Analysis

### Condition Assessments

The Condition Assessment Cost lists what is required to make the building well as it is currently functioning. The cost includes all deficient items based on our field observation and using the Army Lodging standard Cap Ex replacement schedule.

#### Summary of Project Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>4.32%</b>	<b>\$14,732.74</b>
Parking: AC Pavement Damaged or Failing		\$14,441.40
Walks: Ramp Damaged or Failing		\$291.34
<b>07 Thermal &amp; Moisture Protection</b>	<b>4.54%</b>	<b>\$15,471.06</b>
Asphalt Shingle Roof: Beyond Useful Life		\$15,471.06
<b>08 Doors &amp; Windows</b>	<b>6.45%</b>	<b>\$21,982.38</b>
Al. Windows - Beyond Useful Life		\$15,160.79
Wood Door - Beyond Useful Life		\$6,821.59
<b>09 Finishes</b>	<b>25.05%</b>	<b>\$85,324.77</b>
Acoustical Ceiling & Grid: Beyond expt useful life		\$5,777.53
Carpet: Beyond Useful Life		\$22,912.74
Floor Tile: Damaged or Failing		\$5,722.50
Vinyl Wall Covering: Damaged or Failing		\$50,912.00
<b>11 Equipment</b>	<b>15.93%</b>	<b>\$54,254.69</b>
Unit Kitchen: Beyond Useful Life		\$51,429.69
Washing Machine: Beyond expected useful life.		\$2,825.00
<b>13 Special Construction</b>	<b>12.69%</b>	<b>\$43,221.61</b>
Fire Alarm Command: Missing or Inadequate		\$7,225.00
Fire Sprinklers: Missing or Inadequate		\$35,996.61
<b>15 Mechanical</b>	<b>9.37%</b>	<b>\$31,914.82</b>
PTAC: Missing or inadequate		\$31,914.82
<b>16 Electrical</b>	<b>21.65%</b>	<b>\$73,754.65</b>
Branch Circuits: Beyond Expected Useful Life		\$28,480.07
Fixtures, Incandescent: Missing or inadequate		\$37,703.58
Inadequate exterior Lighting		\$7,571.00
<b>Total Raw Cost</b>	<b>100.00%</b>	<b>\$340,657.00</b>

#### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$1,873.61
Force Protection	9.00%	\$33,893.67
General Conditions	10.00%	\$34,065.70
<b>Total Additional Hard Cost</b>		<b>\$69,832.98</b>

#### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Contingency	10.00%	\$41,049.00
SIOH Conus	6.50%	\$29,350.03
Design	10.00%	\$41,049.00

08 MYr Inflation Fct	9.93%	\$51,828.44
<b>Total Soft Cost</b>		<b>\$163,276.47</b>
<b>Total Project</b>		<b>\$573,766.46</b>

## Renovation

The Renovation Cost is based on making changes to the building to meet the Army Lodging Standard Functional Criteria. Unless otherwise stated, this cost also includes all building deficiencies listed under the Condition Assessment Cost.

### Summary of Project Renovation Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>1.83%</b>	<b>\$14,690.00</b>
Site Development		\$14,690.00
<b>03 Concrete</b>	<b>1.03%</b>	<b>\$8,305.50</b>
Stair Construction		\$8,305.50
<b>07 Thermal &amp; Moisture Protection</b>	<b>3.00%</b>	<b>\$24,099.35</b>
Roof Construction		\$13,583.43
Roof Coverings		\$10,515.92
<b>08 Doors &amp; Windows</b>	<b>13.28%</b>	<b>\$106,729.63</b>
Exterior Doors		\$6,966.45
Exterior Windows		\$76,840.00
Interior Doors		\$22,923.18
<b>09 Finishes</b>	<b>27.54%</b>	<b>\$221,300.51</b>
Ceiling Finishes		\$40,396.77
Floor Finishes		\$51,366.38
Partitions		\$49,452.18
Wall Finishes		\$80,085.18
<b>10 Specialties</b>	<b>0.14%</b>	<b>\$1,139.21</b>
Fittings		\$1,139.21
<b>11 Equipment</b>	<b>6.40%</b>	<b>\$51,415.00</b>
Other Equipment		\$51,415.00
<b>13 Special Construction</b>	<b>6.60%</b>	<b>\$53,060.28</b>
Communications & Security		\$23,885.94
Sprinklers		\$29,174.34
<b>15 Mechanical</b>	<b>19.06%</b>	<b>\$153,143.25</b>
Cooling Generating Systems		\$70,512.00
Domestic Water Dist		\$39,663.00
Plumbing Fixtures		\$42,968.25
<b>16 Electrical</b>	<b>10.27%</b>	<b>\$82,490.00</b>
Electrical Service & Distribution		\$74,919.00
Site Lighting		\$7,571.00
<b>19 FF&amp;E</b>	<b>10.84%</b>	<b>\$87,100.00</b>
Interior FF&E allowance		\$87,100.00
Total Raw Cost	100.00%	\$803,472.72

### Additional Hard Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
Spirit	0.50%	\$4,419.10
Force Protection	9.00%	\$79,941.52
General Conditions	10.00%	\$80,347.27
<b>Total Additional Hard Cost</b>		<b>\$164,707.89</b>

### Soft Cost (Template: Army Lodging Renovation)

Parameter Name	Percent	Amount
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Contingency	10.00%	\$96,818.06
SIOH Conus	6.50%	\$69,224.91
Design	10.00%	\$96,818.06
08 MYr Inflation Fct	9.93%	\$122,242.44
<b>Total Soft Cost</b>		<b>\$385,103.47</b>
<b>Total Project Cost for Renovation</b>		<b>\$1,353,284.09</b>

## Replacement

The Replacement Cost is the cost to rebuild the units as part of a new facility including the appropriate back-of-house and public spaces. This cost is based on number and types of units in the renovation model.

### Summary of Project Replacement Cost

CSI	Percent	Amount
<b>02 Site Work</b>	<b>3.73%</b>	<b>\$50,074.68</b>
Parking Lots		\$12,882.00
Site Earthwork		\$37,192.68
<b>03 Concrete</b>	<b>15.90%</b>	<b>\$213,543.00</b>
Floor Construction		\$122,781.40
Slab on Grade		\$27,487.25
Stair Construction		\$8,305.50
Standard Foundations		\$54,968.85
<b>04 Masonry</b>	<b>6.57%</b>	<b>\$88,279.34</b>
Exterior Walls		\$88,279.34
<b>07 Thermal &amp; Moisture Protection</b>	<b>7.43%</b>	<b>\$99,756.23</b>
Roof Construction		\$31,619.38
Roof Coverings		\$68,136.85
<b>08 Doors &amp; Windows</b>	<b>8.36%</b>	<b>\$112,268.89</b>
Exterior Doors		\$11,102.25
Exterior Windows		\$76,840.00
Interior Doors		\$24,326.64
<b>09 Finishes</b>	<b>13.72%</b>	<b>\$184,212.68</b>
Ceiling Finishes		\$29,569.58
Floor Finishes		\$52,165.37
Partitions		\$55,078.03
Wall Finishes		\$47,399.70
<b>10 Specialties</b>	<b>0.13%</b>	<b>\$1,704.04</b>
Fittings		\$1,704.04
<b>11 Equipment</b>	<b>3.83%</b>	<b>\$51,415.00</b>
Other Equipment		\$51,415.00
<b>13 Special Construction</b>	<b>4.93%</b>	<b>\$66,182.50</b>
Communications & Security		\$29,793.12
Sprinklers		\$36,389.38
<b>15 Mechanical</b>	<b>23.09%</b>	<b>\$310,136.41</b>
Cooling Generating Systems		\$87,950.16
Domestic Water Dist		\$39,663.00
Plumbing Fixtures		\$182,523.25
<b>16 Electrical</b>	<b>7.48%</b>	<b>\$100,413.50</b>
Electrical Service & Distribution		\$97,933.15
Site Lighting		\$2,480.35
<b>19 FF&amp;E</b>	<b>4.84%</b>	<b>\$65,000.00</b>
Interior FF&E allowance		\$65,000.00
Total Raw Cost	100.00%	\$1,342,986.27

### Additional Hard Cost (Template: Army Lodging New Construction)

Parameter Name	Percent	Amount
Spirit	0.50%	\$7,386.42

Force Protection	0.00%	\$0.00
General Cond	10.00%	\$134,298.63
<b>Total Additional Hard Cost</b>		<b>\$141,685.05</b>

**Soft Cost (Template: Army Lodging New Construction)**

<b>Parameter Name</b>	<b>Percent</b>	<b>Amount</b>
Contingency	5.00%	\$74,233.57
SIOH Conus	6.50%	\$101,328.82
Design	10.00%	\$148,467.13
08 MYr Inflation Fct	9.93%	\$179,603.99
<b>Total Soft Cost</b>		<b>\$503,633.51</b>
<b>Total Project Cost for Replacement</b>		<b>\$1,988,304.83</b>

**INSERT BUILDING T2340 FLOOR PLANS HERE**

# Army Lodging Wellness Recommendation

## Appendix

ROOM / SPACE	1-10 Units	11-49 Units	50-149 Units	150-199 Units	200-299 Units	300-399 Units	400-599 Units	600-799 Units	800+	At Main Facility on Post Only	Note
<b>Public Areas</b>											
Exterior Entrance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Vestibule	100	100	150	150	200	200	200	200	200		In Main Lodging facilities square footage included in Lobby
Lobby (includes vestibule at Main Lodging facilities)	300-500	300-500	500-800	500-800	800-1000	800-1000	1,000-1,200	1,000-1,200	1,200-1,500	X	Includes square footage of vestibule at Main Lodging facilities
Front Desk	2 station / 100 s.f.	2 station / 100 s.f.	2 station / 100 s.f.	3 station / 150 s.f.	3 station / 150 s.f.	3 station / 250 s.f.	3 station / 250 s.f.	4 station / 300 s.f.	4 station / 300 s.f.	X	
Bell Cart Station	2 carts / 24 s.f.	2 carts / 24 s.f.	3 carts / 36 s.f.	3 carts / 36 s.f.	4 carts / 48 s.f.	4 carts / 48 s.f.	6 carts / 72 s.f.	6 carts / 72 s.f.	8 carts / 96 s.f.		Not required at facilities w/out interior corridors if building is retained.
Breakfast Bar (Seat/Svc)	550	550	550	550	550	550	550	750	1,000	X	Needed at secondary facility, if it is a remote location. CFSC requirement min 550
Passenger Elevators			1 @ 64 s.f. 50-99 rooms 2 @ 64 s.f. 100-149 rooms	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. each	2 @ 64 s.f. 400-499 rooms 3 @ 64 s.f. 500-599 rooms	3 @ 64 s.f. each		If building is over two stories high
Stairs	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each	Numer of stairs based on plan @ 230 s.f. each		
Public Corridors	**	**	**	**	**	**	**	**	**		Minimum 6' wide
Public Telephone Area	2 phones / 12 s.f.	2 phones / 12 s.f.	2 phones / 12 s.f.	2 phones / 12 s.f.	3 phones / 18 s.f.	3 phones / 18 s.f.	4 phones / 24 s.f.	4 phones / 24 s.f.	4 phones / 24 s.f.		House phone in secondary buildings. Pay phones & house phones at Main facility
Vending - Full Service	1 per building / 70 s.f.	1 per building / 70 s.f.	70	70	70-105	105-140	140-210	210-280	280+		1 for every other floor to support up to 200 units / 70 s.f. each
Vending - Ice Only	1 per building / 30 s.f.	1 per building / 30 s.f.	30	30	30-45	45-60	60-90	90-120	120+		1 for every other floor to support up to 200 units / 30 s.f. each
Women - Lobby	100	100	200	200	260	260	315	315	350	X	
Men - Lobby	100	100	200	200	260	260	315	315	350	X	
Multi-Purpose Rm	250	250	250	250	250	250	250	250	250	X	
Study Rooms	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note		1 per 25 extended stay units of 250 s.f. each at posts with schools facilities
Guest Laundries	192	192	192-384	384-576	576-768	768-1152	1152-1536	1536-2112	2112+		CFSC requirement 2w/d for every 75 guest rooms
Gear Wash Rooms	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each	At entrance / 170 s.f. each		Only at facilities with outdoor training
Guest Bulk Storage	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note	See Note		1 unit for every 4 family suites of 25 ea. 40 w/circ.
<b>Guest Rooms</b>											
Guest Room - Standard	300	300	300	300	300	300	300	300			
Guest Room - Ext. Stay	300	300	300	300	300	300	300	300			
Guest Room - Suites	450	450	450	450	450	450	450	450			

ROOM / SPACE	1-10 Units	11-49 Units	50-149 Units	150-199 Units	200-299 Units	300-399 Units	400-599 Units	600-799 Units	800+	At Main Facility on Post Only	Note
<b>Back-of-House Areas</b>											
Manager's Office	180	180	180	180	180	180	180	180	180	X	
Assist. Mgr. Off.	-	-	0 50-99 units 120 100-149 units	120	120	120	120	120	120	X	
Front Office Mgr.	100	100	100	100	100	100	100	100	100	X	
Admin. Offices	2 space / 200-250 s.f.	2 space / 200-250 s.f.	2 spaces / 200-250 s.f.	2 spaces / 200-250 s.f.	5 spaces / 500-600 s.f.	5 spaces / 500-600 s.f.	7 spaces / 800-900 s.f.	7 spaces / 800-900 s.f.	10 spaces / 1,100-1,200 s.f.	X	
Cash Room	50	50	75	75	100	100	125	125	150	X	
Luggage Storage	-	-	75	75	100	100	100	100	100	X	
Admin. Conf. Rm.	250	250	250	250	350	350	350	350	350	X	
Housekeeping Off.	120	120	120	120	120	120	120	120	120	X	
Dirty/Clean Linen Stor.	50	50	50	50	100	100	200	200	400	See Note	At all facilities w/out in-house laundry
In-House Laundry	500	500	500	500	500	500	750	750	900	X	CFSC requirement min 500 s.f
Receiving Office	75	75	75	75	75	75	75	75	75	X	
Maintenance Area	100	100	175	175	250	250	400	400	600	X	
Kitchen Prep Room	150	150	150	150	150	150	150	150	150	X	facility, if it is a remote location.
Break Room		140	210	210	280	280	350	350	420		
Staff Toilet - Men			200	100	100	100	150	150	200		
Staff Toilet - Women		100	100	100	150	150	200	200	250		
Access Corridor	**	**	**	**	**	**	**	**	**		
Receiving	150	150	150	150	150	150	150	150	200	X	
Housekeep. Rms.	128	128-512	512-1280	1280-1792	1792-2560	2560-3456	3456-5120	5120-6912	6912+		128 s.f. for each 15 guest rooms
Service Elevator	80	80	80	80	80	80	80	80	80		
Data/Commo Rm.	100	100	100	100	150	150	150	150	150		
Switch Closets	16 *	16 *	16-48 *	48-64 *	64-96 *	96-128 *	128-144 *	144-256 *	256+ *		1 closet of 16 s.f. for approximately 50 guest rooms
Janitor Closet	50	50	50	50	50	50	50	50	50	X	Only at first floor of Main Lodging facility.
Mechanical Room	*	*	*	*	*	*	*	*	*		
General Stor. Rm.	500	500	500	500	500	500	500	500	500	X	
Bulk Storage Rm.	500	500	500	500	500	500	500	500	500	X	
Electrical Room	140 *	140 *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *	1 per floor @ 140 s.f. each *		One electrical room to serve no more than 100 rooms.
Elevator Equip.Rm.	84	84	84	84	84	84	84	84	84		
<b>EXTERIOR</b>											
Playground (Outdoor)										X	Play ground required at facilities with family stays.
Grounds Maintenance	400	400	400	400	400	400	400	400	400	X	

\* Mechanical/electrical/equipment Spaces to be determined by contractor based on appropriate code and recommended systems.

\*\* Corridors to be determined based on building layout.